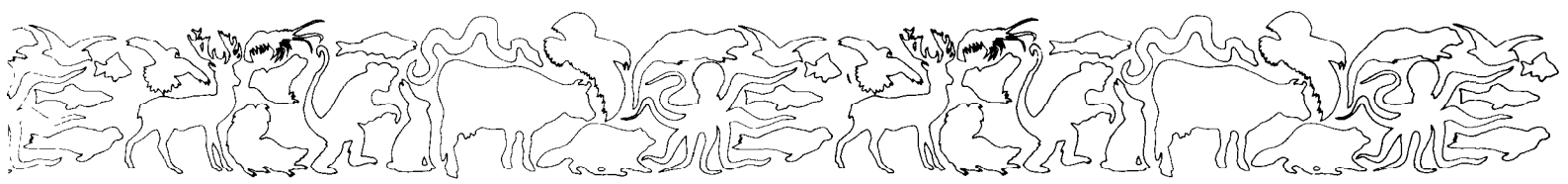
EPA 560-5-87-004E2

NATIONAL BODY-BURDEN DATABASE

CHEMICALS IDENTIFIED IN ANIMALS

1985-1986
VOLUME V, PART 2



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CHEMICALS IDENTIFIED IN ANIMALS
1985-1986
VOLUME V, Part 2

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PART 4

DATABASE RECORDS

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Acenaphthene (8 CI); Acenaphthylene, 1,2-dihydro- (9 CI)
83-32-9
C12-H10
MW 154.21, MP 95 C, BP 279 C at 760 mm Hg, VP 10 mm Hg at 131.2 C

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
5827 Body		a) Not given b) Not given	a) 24 ppb b) 46 ppb Wet wt	a) Chef Menteur Pass at Lake Pontchartrain b) The Rigolets at Lake Pontchartrain. Composite samples, collected 5/80-6/80. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Mussel
MYTILUS GALLOPROVINCIALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5828 Body	a) 29 b) 28	a) Not given b) Not given	a) 7 ppb b) 8 ppb Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
5829 Body		Not given	46 ppb Wet wt	Mean of 8 samples collected 5/80-6/80, Inner Harbor Navigation Canal at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Acenaphthylene

208-96-8
C12-H8
MW 152.21, MP 96.2 C, BP 265-275 C

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
5830 Body		a) Not given b) Not given	a) 34 ppb b) 130 ppb Wet wt	a) Chef Menteur Pass at Lake Pontchartrain b) The Rigolets at Lake Pontchartrain. Composite samples, collected 5/80-6/80. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
5831 Body		Not given	36 ppb Wet wt	Mean of 8 samples collected 5/80-6/80, Inner Harbor Navigation Canal at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Acetanilide, 2-chloro-2',6'-diethyl-N-(methoxymethyl)- (8 CI); Acetamide, 2-chloro-N-(2,6-diethylphenyl)-N-(methoxymethyl)- (9 CI)

15972-60-8
C14-H20-Cl-N-O2
MW 269.77, MP 40-41 C, BP 100 C at 0.02 mm Hg, VP 2.2X10(E-5) mm Hg at 25 C

Mosquito
CULEX PIPIENS

Tissue	Cases Exposure Route	Range	Mean	General Information
5832 Body		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Trace b) 0.0089 ppm c) 0.0452 ppm d) 0.2440 ppm e) 0.0020 ppm f) 0.0142 ppm	a) Applied to sand, measured compound and its polar and nonpolar degradative products as extractable [14-C] b) Unextractable [14-C] c) Applied to sorghum leaves, measured extractable [14-C] d) Unextractable [14-C] e) Co-applied with paraquat (added on d 5), measured extractable [14-C] f) Unextractable [14-C] 2.71 mg [14-C]-labeled mixed with 2.29 mg unlabeled applied to model ecosystem (equivalent to 1.0 lb/A). Measured d 32 in larvae. TLC
DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; HERBICIDES; SNAILS; FISHES; MOSQUITOES; BODY; AQUATIC; PESTICIDES Francis, B.M.; Lampman, R.L.; Metcalf, R.L. 1985 Archives of Environmental Contamination and Toxicology 14:693-704				

Acetanilide, 2-chloro-2',6'-diethyl-N-(methoxymethyl)- (8 CI); Acetamide, 2-chloro-N-(2,6-diethylphenyl)-N-(methoxymethyl)- (9 CI)
15972-60-8
C14-H20-Cl-N-O2
MW 269.77, MP 40-41 C, BP 100 C at 0.02 mm Hg, VP 2.2X10(E-5) mm Hg at 25 C

Mosquitofish
GAMBUSIA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5833 Body		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.0090 ppm b) 0.0111 ppm c) 0.1250 ppm d) 0.1060 ppm e) 0.0096 ppm f) 0.0081 ppm	a) Applied to sand, measured compound and its polar and nonpolar degradative products as extractable [14-C] b) Unextractable [14-C] c) Applied to sorghum leaves, measured extractable [14-C] d) Unextractable [14-C] e) Co-applied with paraquat (added on d 5), measured extractable [14-C] f) Unextractable [14-C] 2.71 mg [14-C]-labeled mixed with 2.29 mg unlabeled applied to model ecosystem (equivalent to 1.0 lb/A). Measured d 32. TLC
DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; HERBICIDES; SNAILS; FISHES; MOSQUITOES; BODY; AQUATIC; PESTICIDES Francis, B.M.; Lampman, R.L.; Metcalf, R.L. 1985 Archives of Environmental Contamination and Toxicology 14:693-704				

Snail
PHYSA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5834 Body		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.0057 ppm b) 0.0120 ppm c) 0.8430 ppm d) 0.5440 ppm e) 0.0242 ppm f) 0.0277 ppm	a) Applied to sand, measured compound and its polar and nonpolar degradative products as extractable [14-C] b) Unextractable [14-C] c) Applied to sorghum leaves, measured extractable [14-C] d) Unextractable [14-C] e) Co-applied with paraquat (added on d 5), measured extractable [14-C] f) Unextractable [14-C] 2.71 mg [14-C]-labeled mixed with 2.29 mg unlabeled applied to model ecosystem (equivalent to 1.0 lb/A). Measured d 32. TLC
DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; HERBICIDES; SNAILS; FISHES; MOSQUITOES; BODY; AQUATIC; PESTICIDES Francis, B.M.; Lampman, R.L.; Metcalf, R.L. 1985 Archives of Environmental Contamination and Toxicology 14:693-704				

Acetic acid, (2,4-dichlorophenoxy)-
94-75-7
C8-H6-Cl2-O3
MW 221.04, MP 138 C, BP 160 C at 0.4 mm Hg

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5835 Bone				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.
REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343				

Tissue	Cases Exposure Route	Range	Mean	General Information
5836 Kidney				Review. Consequences of contamination of aquatic environment by chlorophenols were evaluated. Bioconcentration in fish, tissue levels, and toxicity of the compounds were reviewed.
5837 Liver				Review. Consequences of contamination of aquatic environment by chlorophenols were evaluated. Bioconcentration in fish, tissue levels, and toxicity of the compounds were reviewed.
WATER POLLUTION; FISHES; REVIEW; BIOACCUMULATION; CHLORINE ORGANIC COMPOUNDS; SHEEP; CATTLE; CHICKENS; RATS; BODY; LIVER; EGGS Krijgsheld, K.R.; van der Gen, A. 1986 Chemosphere 15(7):825-860				

Lobster, spiny
PANULIRUS ARGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5838 Body	28 Injection	95.8+/-5.5-4.24+/-2.39%	Not given	Range of means 1 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. Totals of percentages in all tissues excluding urine, and also excluding shell and muscle at 1 hr. Urinary excretion major route of elimination. Florida, south Chromatography
5839 Gills	28 Injection	79+/-6-1+/-0.2 pmol/mg	Not given	Range of means 0.5 and 48 hr after 10 mg/kg [14-C]-labelled with 10 uCi/kg, administered intrapericardially. Not accumulated from hemolymph. Florida, southern Chromatography
5840 Gonads	a) 25 b) 5 Injection	a) 57+/-14-1 pmol/mg b) 61+/-3-1.2 pmol/mg	a) Not given b) Not given	a) Males, range of means 0.5 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially b) Females, 2 and 48 hr No accumulation from hemolymph. Florida, southern Chromatography

(next page)

Acetic acid, (2,4-dichlorophenoxy)-
94-75-7
C8-H6-Cl2-O3
MW 221.04, MP 138 C, BP 160 C at 0.4 mm Hg

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5841 Green gland	28 Injection	955+/-223-32+/-22 pmol/mg	Not given	Range of means 2 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. Accumulated, and excreted rapidly in urine, as parent acid. Florida, southern Chromatography
5842 Hemolymph	28 Injection	142+/-14-0.5+/-0.3 pmol/mg	Not given	Range of means 1 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. From leg (early time points) or pericardial sinus of 320-800 g animals. Florida, southern Chromatography
5843 Hepatopancreas	28 Injection	128+/-23-42+/-38 pmol/mg	Not given	Range of means 2 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. Metabolized in hepatopancreas (HP) to taurine conjugate, and excreted slowly from HP, apparently due to enterohepatic circulation. Florida, southern Chromatography
5844 Intestine	28 Injection	101+/-34-2+/-0.7 pmol/mg	Not given	Range of means 0.5 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. No accumulation from hemolymph. Florida, southern Chromatography
5845 Muscle	4 Injection	12+/-6-0.8+/-0.3 pmol/mg	Not given	8 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. Not accumulated from hemolymph. Florida, southern Chromatography
5846 Shell	3 Injection	Not given	1.5+/-2 pmol/mg	48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. Distribution of 14-C uneven. No accumulation from hemolymph. Florida, southern Chromatography
5847 Stomach	28 Injection	87+/-60-10+/-7 pmol/mg	Not given	Range of means 6 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. No accumulation from hemolymph. Florida, southern Chromatography

(next page)

Acetic acid, (2,4-dichlorophenoxy)-

94-75-7
C8-H6-Cl2-O3
MW 221.04, MP 138 C, BP 160 C at 0.4 mm Hg

Sheep
OVIS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5848 Urine	28 Injection	859+/-344-28 pmol/mg	Not given	Range of means, complete terminal samples 6 and 48 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. Excreted rapidly as parent acid. Florida, southern Chromatography
HEMOLYMPH; HEPATOPANCREAS; STOMACH; INTESTINES; GREEN GLAND; URINE; GILLS; GONADS; SHELL; MUSCLES; BODY; DELIBERATE EXPOSURE; FLORIDA; HERBICIDES; INSECTICIDES; DDT; BIOACCUMULATION; METABOLISM; METABOLITES; AQUATIC; LOBSTERS; PESTICIDES James, M.O. 1982 Drug Metabolism and Disposition 10(5):516-522				

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5849 Kidney				Review. Consequences of contamination of aquatic environment by chlorophenols were evaluated. Bioconcentration in fish, tissue levels, and toxicity of the compounds were reviewed.
5850 Liver				Review. Consequences of contamination of aquatic environment by chlorophenols were evaluated. Bioconcentration in fish, tissue levels, and toxicity of the compounds were reviewed.
WATER POLLUTION; FISHES; REVIEW; BIOACCUMULATION; CHLORINE ORGANIC COMPOUNDS; SHEEP; CATTLE; CHICKENS; RATS; BODY; LIVER; EGGS Krijgsheld, K.R.; van der Gen, A. 1986 Chemosphere 15(7):825-860				

Acetic acid, (2,4,5-trichlorophenoxy)-

93-76-5
C8-H5-Cl3-O3
MW 255.49, MP 153 C (crystals from benzene)

Lobster, spiny
PANULIRUS ARGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5851 Body	6 Injection	93.0+/-13.6-28.0+/-3.6%	Not given	Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Total of percentages in all tissues, excluding urine. Urinary excretion major route of elimination. Florida, southern Chromatography

(next page)

Acetic acid, (2,4,5-trichlorophenoxy)-
93-76-5
C8-H5-Cl3-O3
MW 255.49, MP 153 C (crystals from benzene)

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5852 Gills	6 Injection	60+/-6-13+/-2 pmol/mg	Not given	Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 animals. Not accumulated from hemolymph. Florida, southern Chromatography
5853 Gonads	6 Injection	29+/-16-8+/-1 pmol/mg	Not given	Males. Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 animals. Not accumulated from hemolymph. Florida, southern Chromatography
5854 Green gland	6 Injection	754+/-239-278+/-90 pmol/mg	Not given	Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially.. 320-800 g animals. Accumulated, and excreted rapidly in urine, mostly as parent acid. Florida, southern Chromatography
5855 Hemolymph	6 Injection	100+/-20-18+/-2 pmol/mg	Not given	Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Florida, southern Chromatography
5856 Hepatopancreas	6 Injection	119+/-55-121+/-80 pmol/mg	Not given	Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Metabolized in hepatopancreas (HP) to taurine conjugate, and excreted slowly from HP, apparently due to enterohepatic circulation. Florida, southern Chromatography
5857 Intestine	6 Injection	44+/-8-19+/-9 pmol/mg	Not given	Range of means 6 and 24 after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5858 Muscle	6 Injection	15+/-2-6+/-3 pmol/mg	Not given	Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 animals. Not accumulated from hemolymph. Florida, southern Chromatography
5859 Shell	6 Injection	14+/-4-5+/-1 pmol/mg	Not given	Range of means 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 animals. Not accumulated from hemolymph. Distribution of 14-C uneven. Florida, southern Chromatography

(next page)

Acetic acid, (2,4,5-trichlorophenoxy)-
93-76-5
C8-H5-Cl3-O3
MW 255.49, MP 153 C (crystals from benzene)

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5860 Stomach	6 Injection	49+/-8-44+/-27 pmol/mg	Not given	Range of means 6 and 24 after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5861 Urine	6 Injection	327+/-144-329+/-116 pmol/mg	Not given	Range of means, complete terminal samples 6 and 24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Excreted rapidly, mostly as parent acid. Florida, southern Chromatography
HEMOLYMPH; HEPATOPANCREAS; STOMACH; INTESTINES; GREEN GLAND; URINE; GILLS; GONADS; SHELL; MUSCLES; BODY; DELIBERATE EXPOSURE; FLORIDA; HERBICIDES; INSECTICIDES; DDT; BIOACCUMULATION; METABOLISM; METABOLITES; AQUATIC; LOBSTERS; PESTICIDES James, M.O. 1982 Drug Metabolism and Disposition 10(5):516-522				

Acetic acid, bis(p-chlorophenyl)- (8 CI); Benseneacetic acid, 4-chloro-alpha-(4-chlorophenyl)- (9 CI)
83-05-6
C14-H10-Cl2-O2
Lobster, spiny
PANULIRUS ARGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5862 Body	4 Injection	59.2-76.2+/-2.9%	Not given	6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Totals of percentages in all tissues excluding urine, and also excluding shell and muscle at 6 hr. Florida, southern Chromatography
5863 Gills	4 Injection	41-23+/-4 pmol/mg	Not given	6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Not accumulated from hemolymph. Florida, southern Chromatography
5864 Gonads	4 Injection	71-30+/-3 pmol/mg	Not given	Males, 6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography

(next page)

Acetic acid, bis(p-chlorophenyl)- (8 CI); Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)- (9 CI)
83-05-6
C14-H10-Cl2-O2
Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5865 Green gland	4 Injection	316-96+/-19 pmol/mg	Not given	6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Accumulated from hemolymph. Florida, southern Chromatography
5866 Hemolymph	4 Injection	35-22.6+/-6.7 pmol/mg	Not given	6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Florida, southern Chromatography
5867 Hepatopancreas	4 Injection	351-210+/-49 pmol/mg	Not given	6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Hepatopancreas (HP) major organ of accumulation. Metabolized to taurine conjugate and excreted slowly from HP, apparently due to enterohepatic circulation. Florida, southern Chromatography
5868 Intestine	4 Injection	110-72+/-10 pmol/mg	Not given	6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5869 Muscle	3 Injection	Not given	13+/-1 pmol/mg	24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5870 Shell	3 Injection	Not given	35+/-10 pmol/mg	24 hr after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. Distribution of 14-C uneven. No accumulation from hemolymph. Florida, southern Chromatography
5871 Stomach	4 Injection	110-60+/-19 pmol/mg	Not given	6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography

(next page)

Acetic acid, bis(p-chlorophenyl)- (8 CI); Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)- (9 CI)
83-05-6
C14-H10-Cl2-O2
Lobster, spiny
PANULIRUS ARGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5872 Urine	4 Injection	94-8+/-57 pmol/mg	Not given	Complete terminal samples, 6 (1 animal) and 24 hr (mean of 3) after 10 mg/kg, [14-C]-labelled with 10 uCi/kg, administered intrapericardially. 320-800 g animals. 60.8+/-29.3% was metabolized to taurine conjugate by 24 hr. Florida, southern Chromatography
HEMOLYMPH; HEPATOPANCREAS; STOMACH; INTESTINES; GREEN GLAND; URINE; GILLS; GONADS; SHELL; MUSCLES; BODY; DELIBERATE EXPOSURE; FLORIDA; HERBICIDES; INSECTICIDES; DDT; BIOACCUMULATION; METABOLISM; METABOLITES; AQUATIC; LOBSTERS; PESTICIDES James, M.O. 1982 Drug Metabolism and Disposition 10(5):516-522				

Acetic acid, phenyl- (8 CI); Benzeneacetic acid (9 CI)
103-82-2
C8-H8-O2
MW 136.14, MP 76.7 C, BP 265.5 C, VP 1 mm Hg at 97.0 C
Lobster, spiny
PANULIRUS ARGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5873 Body	a) 11 b) 14 Injection	64.1+/-12.1-37.7+/-8.1%	Not given	Ranges of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. Totals of percentages in all tissues excluding urine. Florida, southern Chromatography
5874 Gills	25 Injection	88+/-12.9+/-9.8 pmol/mg	Not given	Range of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. Accumulated to some extent from hemolymph. Florida, southern Chromatography
5875 Gonads	a) 11 b) 14 Injection	a) 54.2+/-12.1-10.8+/-9.1 pmol/mg b) 77.1+/-51.8-1.8+/-1.4 pmol/mg	a) Not given b) Not given	a) Males b) Females Ranges of means 1 and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5876 Green gland	25 Injection	303+/-94-35+/-16 pmol/mg	Not given	Range of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. Accumulated from hemolymph. Florida, southern Chromatography

(next page)

Acetic acid, phenyl- (8 CI); Benzeneacetic acid (9 CI)
103-82-2
C8-H8-O2
MW 136.14, MP 76.7 C, BP 265.5 C, VP 1 mm Hg at 97.0 C

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5877 Hemolymph	25 Injection	17.2+/-6-1.0+/-0.2 pmol/mg	Not given	Range of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. Florida, southern Chromatography
5878 Hepatopancreas	25 Injection	1260+/-374-745+/-250 pmol/mg	Not given	Range of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. Hepatopancreas (HP) major organ of accumulation. Extensively metablized to phenylacetyltaurine and excreted slowly from HP, apparently due to enterohepatic circulation. Florida, southern Chromatography
5879 Intestine	25 Injection	186+/-49-70+/-19	Not given	Range of means 1 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5880 Muscle	23 Injection	11-1.5+/-0.7 pmol/mg	Not given	Range of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5881 Shell	23 Injection	16-1.5+/-0.5 pmol/mg	Not given	Range of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. Distribution of 14-C uneven for 48 hr. No accumulation from hemolymph. Florida, southern Chromatography
5882 Stomach	25 Injection	476+/-428-289+/-99 pmol/mg	Not given	Range of means 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. No accumulation from hemolymph. Florida, southern Chromatography
5883 Urine	25 Injection	410+/-111-11.1+/-7.5 pmol/mg	Not given	Range of means, complete terminal samples 6 hr and 3 wk after 10 mg/kg, [14-C]-labelled with 20 uCi/kg, administered intrapericardially. 320-800 g animals. 66.4+/-12.3% was metabolized to phenylacetyltaurine by 24 hr. Florida, southern Chromatography

HEMOLYMPH; HEPATOPANCREAS; STOMACH; INTESTINES; GREEN GLAND; URINE; GILLS; GONADS; SHELL; MUSCLES; BODY; DELIBERATE EXPOSURE; FLORIDA; HERBICIDES; INSECTICIDES; DDT; BIOACCUMULATION; METABOLISM; METABOLITES; AQUATIC; LOBSTERS; PESTICIDES

James, M.O. 1982 Drug Metabolism and Disposition 10(5):516-522

Alkanes (No postings in CHEMLINE).

Shrimp, brown
PENAEUS AZTECUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5884 Body	18	<0.01-2.5 ppm	0.38 ppm	Collected by the National Marine Fisheries Service from locations near oil/gas production platforms and associated structures in the Buccaneer oil field, 8/76-3/78. Data for n-alkanes with 12-36 carbons/molecule. Branched alkanes, pristane and phytane also observed. Only 13 of 40 total shrimp (different species) contained petroleum alkanes, thus not appreciably tainted. Texas, Galveston, Gulf of Mexico GC

ENVIRONMENTAL EXPOSURE; AQUATIC; BODY; SHRIMP; WATER POLLUTION; GULF OF MEXICO; TEXAS; BIOLOGICAL MONITORING; INDUSTRIAL AREAS; OIL PRODUCTION; HYDROCARBONS
Middleditch, B.S.; Basile, B.; Chang, E.S. 1982 Bulletin of Environmental Contamination and Toxicology 29:18-23

Shrimp, chevron
SICYONIA DORSALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5885 Body	1	Not applicable	7.4 ppm	Collected by the National Marine Fisheries Service from locations near oil/gas production platforms and associated structures in the Buccaneer oil field, 8/76-3/78. Data for n-alkanes with 12-36 carbons/molecule. Branched alkanes, pristane and phytane also observed. Only 13 of 40 total shrimp (different species) contained petroleum alkanes, thus not appreciably tainted. Texas, Galveston, Gulf of Mexico GC

ENVIRONMENTAL EXPOSURE; AQUATIC; BODY; SHRIMP; WATER POLLUTION; GULF OF MEXICO; TEXAS; BIOLOGICAL MONITORING; INDUSTRIAL AREAS; OIL PRODUCTION; HYDROCARBONS
Middleditch, B.S.; Basile, B.; Chang, E.S. 1982 Bulletin of Environmental Contamination and Toxicology 29:18-23

Shrimp, mantis
SEQUILLA EMPUSA

Tissue	Cases Exposure Route	Range	Mean	General Information
5886 Body	3	0.05-0.30 ppm	Not given	Collected by the National Marine Fisheries Service from locations near oil/gas production platforms and associated structures in the Buccaneer oil field, 8/76-3/78. Data for n-alkanes with 12-36 carbons/molecule. Branched alkanes, pristane and phytane also observed. Only 13 of 40 total shrimp (different species) contained petroleum alkanes, thus not appreciably tainted. Texas, Galveston, Gulf of Mexico GC

ENVIRONMENTAL EXPOSURE; AQUATIC; BODY; SHRIMP; WATER POLLUTION; GULF OF MEXICO; TEXAS; BIOLOGICAL MONITORING; INDUSTRIAL AREAS; OIL PRODUCTION; HYDROCARBONS
Middleditch, B.S.; Basile, B.; Chang, E.S. 1982 Bulletin of Environmental Contamination and Toxicology 29:18-23

Alkanes (No postings in CHEMLINE).

Shrimp, pink
PENAEUS DUORARUM

Tissue	Cases Exposure Route	Range	Mean	General Information
5887 Body	3	<0.01-0.09 ppm	Not given	Collected by the National Marine Fisheries Service from locations oil/gas production platforms and associated structures in the Bucaneer oil field, 8/76-3/78. Data for n-alkanes with 12-36 carbons/molecule. Branched alkanes, pristane and phytane also observed. Only 13 of 40 total shrimp (different species) contained petroleum alkanes, this not appreciably tainted. Gulf of Mexico, TX, Galveston GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BODY; SHRIMP; WATER POLLUTION; GULF OF MEXICO; TEXAS; BIOLOGICAL MONITORING; INDUSTRIAL AREAS; OIL PRODUCTION; HYDROCARBONS Middleditch, B.S.; Basile, B.; Chang, E.S. 1982 Bulletin of Environmental Contamination and Toxicology 29:18-23				

Shrimp, sugar
TRACHYPENAEUS SIMILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5888 Body	11	<0.01-2.4 ppm	Not given	Collected by the National Marine Fisheries Service from locations near oil/gas production platforms and associated structures in the Buccaneer oil field, 8/76-3/78. Data for n-alkanes with 12-36 carbons/molecule. Branched alkanes, pristane and phytane also observed. Only 13 of 40 total shrimp (different species) contained petroleum alkanes, thus not appreciably tainted. Texas, Galveston, Gulf of Mexico GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BODY; SHRIMP; WATER POLLUTION; GULF OF MEXICO; TEXAS; BIOLOGICAL MONITORING; INDUSTRIAL AREAS; OIL PRODUCTION; HYDROCARBONS Middleditch, B.S.; Basile, B.; Chang, E.S. 1982 Bulletin of Environmental Contamination and Toxicology 29:18-23				

Aluminum

7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Bass, smallmouth
MICROPTERUS DOLOMIEUI

Tissue	Cases Exposure Route	Range	Mean	General Information
5889 Body	10	1.1-10.2 ug/g Wet wt	3.0+/-2.8 ug/g Wet wt	Carcass with liver, kidney, gill filaments and gastrointestinal tract removed. Means of two determination. Mean difference in duplicate determinations 18+/-12%. Since GI tract contents contained highly variable amounts, and gut tissues had levels similar to whole bodies without gut contents, removal of entire gut reduced variability. Georgia; North Carolina AAS
5890 Body, whole	10	1.2-12.3 ug/g Wet wt	3.9+/-3.6 ug/g Wet wt	Means of 2 determinations. Estimated by summing all parts (less gut contents) according to % body wt. With gut contents included, levels were 1.3-97.4 (mean 13.8+/-29.5) ug/g wet wt. In a separate experiment, mean % difference in duplicate determinations of whole body levels were 46+/-43%. Variability probably from including gut contents and gill filaments which had variable amounts and may have been incompletely homogenized. Georgia; North Carolina AAS
5891 Gills	10	3.8-198 ug/g Wet wt	58+/-64 ug/g Wet wt	Means of two determinations. Incomplete homoginization may have caused variability among samples. Georgia; North Carolina AAS
5892 Gut	10	1.3-31.5 ug/g Wet wt	2.5+/-1.1 ug/g Wet wt	Gut included stomach, intestine, and pyloric caeca. Means of two determinations. Highest level (31.5 ug/g) not included in mean. Since GI tract contents contained highly variable amounts, and gut tissues had levels similar to whole bodies without gut contents, removal of entire gut reduced varability. Georgia; North Carolina AAS
5893 Kidney	10	<1.0-2.0 ug/g Wet wt	<1.0 ug/g Wet wt	Means of two determination. Detection limit 1.0 ug/g wet wt. Georgia; North Carolina AAS
5894 Liver	10	<0.5-4.6 ug/g Wet wt	1.5+/-1.2 ug/g Wet wt	Means of two determinations. Georgia; North Carolina AAS

BODY; GILLS; AQUATIC; LIVER; KIDNEYS; GASTROINTESTINAL SYSTEM; FISHES; ENVIRONMENTAL EXPOSURE; GEORGIA; NORTH CAROLINA; ALUMINUM; BIOACCUMULATION

Brumbaugh, W.G.; Kane, D.A. 1985 Environmental Science and Technology 19(9):828-831

Aluminum

7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5895 Blood, serum	607	a) 1-3 mg/L b) Not detected	a) Not given b) Not given	a) 12 cases b) 595 cases Detection limit 1.0 mg/L. Mineral profile, 1981-1983. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Tissue	Cases Exposure Route	Range	Mean	General Information
5896 Brain	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.41 ug/g b) 0.57 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Tissue	Cases Exposure Route	Range	Mean	General Information
5897 Kidney	90	a) 1-34 mg/kg b) Not detected Wet wt	a) Not given b) Not given	a) 32 cases b) 58 cases Detection limit 1.0 mg/L. Mineral profile, 1981-83. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Aluminum

7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5898 Kidney	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.84 ug/g b) 0.82 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Tissue	Cases Exposure Route	Range	Mean	General Information
5899 Liver	229	a) 1-7 mg/kg b) Not detected Wet wt	a) Not given b) Not given	a) 95 cases b) 134 cases Detection limit 1.0 mg/L. Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES
BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565				

Tissue	Cases Exposure Route	Range	Mean	General Information
5900 Liver	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 1.11 ug/g b) 0.84 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
5901 Muscle	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 1.17 ug/g b) 2.04 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation

(next page)

Aluminum

7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Cattle
BOS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5902 Spleen	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) Not detected b) 0.73 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Mussel
MYTILUS CALIFORNIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5903 Body	a) 405 b) 630 c) 495 d) 150	a) 350+/-61-789+/-84 ug/g b) 280+/-36-780+/-73 ug/g c) 357+/-63-1860+/-570 ug/g d) 206+/-23-318+/-237 ug/g Dry wt	a) Not given b) Not given c) Not given d) Not given	a) Transplanted to bay in 1980 b) Transplanted in 1981 c) Transplanted in 1982 d) From intertidal collection site, not transplanted, range over 1980-2 45-65 mm animals transplanted to 16 sites for 4-5.5 mo. Gonads removed before levels measured. California, San Francisco Bay
ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; MUSSELS; BODY; AQUATIC; WATER POLLUTION; METALS; SILVER; ALUMINUM; CADMIUM; CHROMIUM; COPPER; MERCURY; MANGANESE; LEAD; ZINC; CALIFORNIA Smith, D.R.; Stephenson, M.D.; Flegal, A.R. 1986 Environmental Toxicology and Chemistry 5:129-138				

Rabbit

Tissue	Cases Exposure Route	Range	Mean	General Information
5904 Blood	a) 6 b) 6 Injection	a) Not given b) Not given	a) <20 ug/kg b) 205+/-52 ug/kg S.E. Wet wt	a) Controls, sham operated b) Dosed for 28 d with 2.52 mg/kg. d, S.C. by implanted osmotic pumps Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS
5905 Blood, plasma	a) 6 b) 6 Injection	a) Not given b) Not given	a) <20 ug/kg b) 248+/-58 ug/kg S.E. Wet wt	a) Controls, sham operated b) Dosed for 28 d with 2.52 mg/kg. d, S.C. by implanted osmotic pumps Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS

(next page)

Aluminum

7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Rabbit

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5906 Bone	a) 6 b) 6 Injection	a) Not given b) Not given	a) 7114+/-74 ug/kg b) 56,900+/-888.2 ug/kg S.E. Wet wt	a) Controls, sham operated b) Dosed for 28 d with 2.52 mg/kg. d, S.C. by implanted osmotic pumps Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS
5907 Brain	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 246+/-59 ug/kg b) 175+/-70 ug/kg c) 231+/-44 ug/kg d) 460+/-75 ug/kg e) 104+/-15 ug/kg f) 147+/-2 ug/kg S.E. Wet wt	a) Grey matter, controls b) Treated c) White matter, controls d) Treated e) Hippocampus, controls f) Treated Controls sham operated. Treated group dosed for 28 d with 2.52 mg/kg.d, S.C. by implanted osmotic pumps. Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS
5908 Heart	a) 6 b) 6 Injection	a) Not given b) Not given	a) 70+/-41 ug/kg b) 1139+/-202 ug/kg Wet wt	a) Controls, sham operated b) Dosed for 28 d with 2.52 mg/kg. d, S.C. by implanted osmotic pumps Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS
5909 Kidney	a) 6 b) 6 c) 6 d) 6 Injection	a) Not given b) Not given c) Not given d) Not given	a) 764+/-118 ug/kg b) 20,612+/-2600 ug/kg c) 648+/-251 ug/kg d) 11,892+/-3030 ug/kg Wet wt	a) Cortex, controls b) Treated c) Medulla, controls d) Treated Controls sham operated. Treated group dosed for 28 d with 2.52 mg/kg.d, S.C. by implanted osmotic pumps. Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS
5910 Liver	a) 6 b) 6 Injection	a) Not given b) Not given	a) 116+/-74 ug/kg b) 6313+/-1451 ug/kg S.E. Wet wt	a) Controls, sham operated b) Dosed for 28 d with 2.52 mg/kg. d, S.C. by implanted osmotic pumps Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS
5911 Muscle	a) 6 b) 6 Injection	a) Not given b) Not given	a) 332+/-65 ug/kg b) 1637+/-457 ug/kg Wet wt	a) Controls, sham operated b) Dosed for 28 d with 2.52 mg/kg. d, S.C. by implanted osmotic pumps Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS

(next page)

Aluminum

7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Rabbit

Tissue	Cases Exposure Route	Range	Mean	General Information
5912 Testis	a) 6 b) 6 Injection	a) Not given b) Not given	a) 115+/-51 ug/kg b) 1837+/-16 ug/kg Wet wt	a) Controls, sham operated b) Dosed for 28 d with 2.52 mg/kg. d, S.C. by implanted osmotic pumps Male New Zealand white rabbits, 5-6 wk old. Detection limit 1.03 ug/kg. North Carolina AAS
DELIBERATE EXPOSURE; RABBITS; ALUMINUM; BLOOD; BLOOD PLASMA; BONES; KIDNEYS; LIVER; MUSCLES; HEART; TESTES; BRAIN; METALS; INJECTION				
Du Val, G.; Grubb, B.R.; Bentley, P.J. 1986 Journal of Toxicology and Environmental Health 19:97-104				

Sponge
SPIRASTRELLA CUSPIDIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
5913 Body		0-0.1 ug/g Dry wt	Not given	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom
BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS				
Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152				

Sponge (P. foetida)
PROSTYLYSSA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
5914 Body		0-0.1 ug/g Dry wt	Not given	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom
BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS				
Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152				

Americium, isotope of mass 241
14596-10-2
Am
Brittlestar
OPHIURA TEXTURATA

Tissue	Cases Exposure Route	Range	Mean	General Information
5915 Body	5	a) Not given b) Not given	a) 87% b) 31%	a) Percent assimulated of total ingested b) Percent retained of initial dose after 113 d Retention following single ingestion of labeled food. Distribution in 4 cases at 113 d after dose: central disk 7.5+/-3.4% of total body burden, arms 14.9+/-11.3%, gut 77.6+/-14.5%. Mean wet wt 2.9 g. Monaco
CRUSTACEANS; DELIBERATE EXPOSURE; AQUATIC; RADIONUCLIDES; BIOCONCENTRATION; BODY; COMPARATIVE EVALUATIONS; AMERICIUM Fowler, S.W.; Carvalho, F.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:826-834				

Crinoid
ANTEDON MEDITERRANEA

Tissue	Cases Exposure Route	Range	Mean	General Information
5916 Body	6	a) Not given b) Not given	a) 81% b) 49%	a) Percent retained at d 1 b) Percent retained at d 67 Retention following exposure to labeled sea water with specific radioactivity of 9 Bq/ml (0.24 nCi/ml). Estimated from graph. Mean wet wt 0.76 g.
CRUSTACEANS; DELIBERATE EXPOSURE; AQUATIC; RADIONUCLIDES; BIOCONCENTRATION; BODY; COMPARATIVE EVALUATIONS; AMERICIUM Fowler, S.W.; Carvalho, F.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:826-834				

Lobster, squat
GALATHEA STRIGOSA

Tissue	Cases Exposure Route	Range	Mean	General Information
5917 Body	5	a) Not given b) 1.4-33%	a) 58% b) Not given	a) Percent assimulated of total ingested b) Percent retained of initial dose after 113 d Retention following single ingestion of labeled food. Distribution at end of experiment: digestive tract $</=$10% of total body burden. Mean wet wt 2.3 g.
CRUSTACEANS; DELIBERATE EXPOSURE; AQUATIC; RADIONUCLIDES; BIOCONCENTRATION; BODY; COMPARATIVE EVALUATIONS; AMERICIUM Fowler, S.W.; Carvalho, F.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:826-834				

Americium, isotope of mass 241
14596-10-2
Am
Tunicate
HALOCYNTHIA PAPILLOSA

Tissue	Cases Exposure Route	Range	Mean	General Information
5918 Body	3	a) Not given b) Not given	a) 81% b) 23%	a) Percent retained at d 1 b) Percent retained at d 67 Retention following exposure to labeled sea water with specific radioactivity of 9 Bq/ml (0.24 nCi/ml). Estimated from graph. Mean wet wt 2.6 g. Distribution after 22 days uptake: body wall 90.2+/-2.2%, internal tissues 6.8+/-1.1%, atrial water 3.3+/-1.3% of total body burden. Distribution after 67 days loss: body wall 91.8+/-3.1%, internal tissues 5.6+/-1.6%, atrial water 2.5+/-2.9%.
CRUSTACEANS; DELIBERATE EXPOSURE; AQUATIC; RADIONUCLIDES; BIOCONCENTRATION; BODY; COMPARATIVE EVALUATIONS; AMERICIUM Fowler, S.W.; Carvalho, F.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:826-834				

Ammonia
7664-41-7
H3-N
MW 17.03, MP -77.7 C, BP -33.35 C, VP 10 atm at 25.7 C
Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5919 Blood		a) 0.96+/-0.27-3.67+/-1.68 mg b) 0.17+/-0.01-0.55+/-0.04 mg c) 0.13+/-0.06-0.27+/-0.13 mg d) 1.15+/-0.33-5.02+/-2.74 mg e) 0.13+/-0.01-0.74+/-0.33 mg f) 0.13+/-0.03-0.53+/-0.25 mg /100 ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.125 g urea/kg, portal, 0 & 60 min post-dose, 3 animals b) Carotid, 0 & 30 min c) Jugular, 0 & 60 min d) 0.25 g urea/kg, portal, 0 & 30 min, 4 animals e) Carotid, 0 & 30 min f) Jugular, 0 & 60 min Holstein steers. Additional time points as well as data on 0.5 g/kg doses in this and a second experiment on Jersey cows. Microdiffusion
5920 Lymph		a) 0.19-0.48 mg b) 0.18-0.42 mg /100 ml	a) Not given b) Not given	a) 0.125 g urea/kg, 0 + 180 min post-dose, 3 animals b) 0.25 g urea/kg, 0 + 180 min Thoracic duct lymph, Holstein steers. Additional time points as well as data on 0.5 g/kg doses in this and a second experiment on Jersey cows. Microdiffusion
DELIBERATE EXPOSURE; BLOOD; LYMPH; CATTLE; AMMONIA; TERRESTRIAL Bartley, E.E.; Avery, T.B.; Nagaraja, T.G.; Watt, B.R.; Davidovich, A.; Galitzer, S.; Lassman, B. 1981 Journal of Animal Science 53(2):494-498				

Anisole, 2,3,4,5,6-pentachloro- (8 CI); Benzene, pentachloromethoxy- (9 CI)

1825-21-4
C7-H3-Cl5-O
MW 280.35

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
5921 Body		0.00-0.07 ug/g Wet wt	Not given	Study of 315 composite samples (3-5 adults of species) from 107 stations in more than 45 states, 1980-81. Range from total of 62 species. Maximum value in lipid wt=1.9 ug/g. Part of National Pesticides Monitoring Program. United States GLC

ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; UNITED STATES; PESTICIDES; PESTICIDE RESIDUES; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; TOXAPHENE; COMPARATIVE EVALUATIONS; WATER POLLUTION; BIOLOGICAL MONITORING

Schmitt, C.J.; Zajicek, J.L.; Ribick, M.A. 1985 Archives of Environmental Contamination and Toxicology 14:225-260

Anthracene

120-12-7
C14-H10
MW 178.22, MP 218 C, BP 342 C, VP 1 mm Hg at 145.0 C (sublimes)

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
5922 Body		a) Not given b) Not given	a) 36 ppb b) 43 ppb Wet wt	a) Chef Menteur Pass at Lake Pontchartrain b) The Rigolets at Lake Pontchartrain. Composite samples, collected 5/80-6/80. Louisiana, Lake Pontchartrain GC/MS

ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS

McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569

Anthracene
120-12-7
C14-H10
MW 178.22, MP 218 C, BP 342 C, VP 1 mm Hg at 145.0 C (sublimes)

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
5923 Body		a) <0.05-0.4 ug/g b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) <0.08-3.2 ug/g h) Not applicable i) Not applicable j) <0.09-0.09 ug/g	a) Not given b) 0.1 ug/g c) 0.1 ug/g d) <0.1 ug/g e) 0.1 ug/g f) 0.1 ug/g g) Not given h) <0.09 ug/g i) <0.01 ug/g j) <0.09 ug/g	a) Heron Island, 7 sites b) Polmaise Reef, 1 site c) Masthead Island, 1 site d) Wistari Reef e) One Tree Island, 1 site f) Wreck Island, 1 site g) Lizard Island, 4 sites h) Carter Reef, 1 site i) Flinder's Reef, 1 site j) Orpheus Island, 3 sites Collections in Great Barrier Reef. Levels are lowest reported in the world. Australia, Great Barrier Reef Fluorimetry
BODY; CLAMS; AQUATIC; ENVIRONMENTAL EXPOSURE; AUSTRALIA; POLYCYCLIC AROMATIC HYDROCARBONS; WATER POLLUTION; LAND POLLUTION; BIOACCUMULATION; ANIMAL POPULATIONS Smith, J.D.; Bagg, J.; Bycroft, B.M. 1985 Environmental Science and Technology 18(5):353-358				

Mussel
MYTILUS GALLOPROVINCIALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5924 Body	a) 29 b) 28	a) Not given b) Not given	a) 9 ppb b) 8 ppb Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541				

Anthracene

120-12-7
C14-H10
MW 178.22, MP 218 C, BP 342 C, VP 1 mm Hg at 145.0 C (sublimes)

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5925 Body		a) Not detected-15 ug/kg b) Not detected-9 ug/kg Wet wt	a) Not given b) Not given	a) Collections from 4 sites, 10/9 and 10/12/78 b) From 3 sites, 5/9, 5/23, 6/5/79 Detection limit 0.5 ug/kg. Composite samples of at least 10 individuals analyzed. Finland, Archipelago Sea GLC/MS

ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION

Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
5926 Body		Not given	44 ppb Wet wt	Mean of 8 samples collected 5/80-6/80, Inner Harbor Navigation Canal at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS

ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS

McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
5927 Body	a) 4 b) 4 c) 4 d) 4 e) 4 f) 4 Ingestion	a) 175-225 BCF b) 140-160 BCF c) 550-600 BCF d) 230-360 BCF e) 710-820 BCF f) 565-580 BCF	a) 200 BCF b) 150 BCF c) 575 BCF d) 300 BCF e) 775 BCF f) 575 BCF	a) 24 hr, alone b) 24 hr, complex c) 48 hr, alone d) 48 hr, complex e) 72 hr, alone f) 72 hr, complex Bioconcentration factors after exposure to 50 ug/l C-14-anthracene alone, or as part of complex oil shale retort water mixture. Calculated steady-state bioconcentration factor was 9200 alone and 5500 for complex mixture. Values estimated from graph. Wyoming HPLC; Scintillation counting

BODY; DELIBERATE EXPOSURE; JUVENILES; WYOMING; FISHES; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION; BIOCONCENTRATION

Linder, G.; Bergman, H.L.; Meyer, J.S. 1985 Environmental Toxicology and Chemistry 4:549-558

Antimony
7440-36-0
Sb
AtW 121.75, MP 630 C, BP 1635 C, VP 1 mm Hg at 886 C, 10 mm Hg at 960 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5928 Brain	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.06 ug/g b) 0.06 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
5929 Kidney	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.07 ug/g b) 0.10 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
5930 Liver	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.05 ug/g b) 0.11 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
5931 Muscle	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.04 ug/g b) 0.09 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
5932 Spleen	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.03 ug/g b) 0.08 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Arochlor 1242
53469-21-9
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Crab, fiddler
UCA PUGNAX

Tissue	Cases Exposure Route	Range	Mean	General Information
5933 Body	a) 5 b) 5	a) 0-20 ug b) 0-9 ug Per crab	a) Not given b) Not given	a) Days 1 and 35, total accumulation from PCB-laden (17 ng/g wet wt, 85 ng/g dry wt) SPARTINA detritus in culture dishes. Second feeding on d 19, peak of 22 ug/crab on d 27. b) Days 1 and 35, total accumulation from PCB-laden water (14-15 ng/mL) in culture dishes, with contaminated water added at 0.42 mL/min (constant volume of 200 mL) Estimated from graph. Approximate accumulation rate for a) was 1 ug PCB/d/crab, for b) 0.1 PCB/d/crab. New Jersey GLC
NEW JERSEY; CRUSTACEANS; POLYCHLORINATED BIPHENYLS; DELIBERATE EXPOSURE; BIOACCUMULATION; BODY; AQUATIC Marinucci, A.C.; Bartha, R. 1982 Bulletin of Environmental Contamination and Toxicology 29:326-333				

Prawn
MACROBRACHIUM ROSENBERGII

Tissue	Cases Exposure Route	Range	Mean	General Information
5934 Body	2000	a) Not given b) 2.20+/-0.16-1.30+/-0.09 ug/g c) 6.10+/-0.46-3.60+/-0.71 ug/g d) 7.00+/-1.00-3.30+/-0.07 ug/g Wet wt Ranges of means	a) 0.06+/-0.1 ug/g b) Not given c) Not given d) Not given Wet wt	a) Controls, 100% clean sand b) 10% contaminated sediment (v/v), measurements d 2 and d 70, peaks 2.20 ug/g d 7 and d 40 c) 50% contaminated sediment, measurements d 2 and d 70, peak 7.00 ug/g d 50 d) 100% contaminated sediment, measurements d 2 and d 55, peak 9.30 ug/g d 7 Exposed for 50 d to sediment from Sheboygan River, WI, containing environmental contaminants. 20 d depuration followed. Background levels in animals 0.01 ug/g wet wt.
MOLLUSKS; AQUATIC; DELIBERATE EXPOSURE; WATER POLLUTION; LEAD; CADMIUM; POLYCHLORINATED BIPHENYLS; JUVENILES; CRUSTACEANS Tatem, H.E. 1986 Archives of Environmental Contamination and Toxicology 15:171-183				

Arochlor 1248
12672-29-6
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bass, rock
AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5935 Body		Not applicable	1.29 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5936 Body		Not applicable	8.81 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5937 Body		Not applicable	0.06 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Arochlor 1248

12672-29-6

EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Bullhead, brown

ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5938 Body		Not applicable	2.01 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Bullhead, yellow

ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5939 Body		Not applicable	0.88 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Arochlor 1248
12672-29-6
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
5940 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 0.42 mg/kg b) 21.30 mg/kg c) 51.37 mg/kg d) 2.75 mg/kg e) 5.76 mg/kg f) <0.05 mg/kg g) 4.81 mg/kg h) 4.72 mg/kg i) 12.90 mg/kg	a) Black River, OH, 10/21/81 b) Sheboygan River, WI, 9/30/80 c) Another sample, same as b) d) Menominee River, WI, 8/15/81 e) Kinnickinnic River, WI, 7/15/81 f) Wolf River, WI, 9/15/80 g) Fox River, WI, above DePere, 10/10/80 h) Same, except 11/15/81 i) Fox River, below DePere, 10/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
5941 Body		0.00-8.47 ug/g Wet wt	Not given	Study of 315 composite samples (3-5 adults of species) from 107 stations in more than 45 states, 1980-81. Range from total of 62 species. Maximum value in lipid wt=143.8 ug/g. Part of National Pesticides Monitoring Program. United States GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; UNITED STATES; PESTICIDES; PESTICIDE RESIDUES; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; TOXAPHENE; COMPARATIVE EVALUATIONS; WATER POLLUTION; BIOLOGICAL MONITORING Schmitt, C.J.; Zajicek, J.L.; Ribick, M.A. 1985 Archives of Environmental Contamination and Toxicology 14:225-260				

Arochlor 1248

12672-29-6

EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Pike, northern

ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5942 Body		a) Not applicable b) Not applicable	a) 4.17 mg/kg b) 31.3 mg/kg	a) Ashtabula River, OH, 10/28/81 b) Sheboygan River WI, 9/30/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Reindeer

RANGIFER sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5943 Body	2 Ingestion	352.6-1030 ug	691.3 ug	Total burden in 3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 19200 ug. Means calculated by extractor. Sweden, Lake Rogen district
5944 Liver	2 Ingestion	11.3-20.4 ng/g	18.35 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 19200 ug. Means calculated by extractor. Value lower in 4-yr old. Sweden, Lake Rogen district
5945 Muscle	2 Ingestion	13.5-41.9 ng/g	27.7 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 19200 ug. Means calculated by extractor. Sweden, Lake Rogen district

ENVIRONMENTAL EXPOSURE; DEER; BODY; MUSCLES; LIVER; SWEDEN; TERRESTRIAL; FOOD CONTAMINATION; ANIMAL FEEDS; POLYCHLORINATED BIPHENYLS; DDD; DDE; LINDANE; HEXACHLOROBENZENE; PESTICIDES

Villeneuve, J.P.; Holm, E.; Cattini, C. 1985 Chemosphere 14(11/12):1651-1658

Arochlor 1248
12672-29-6
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sucker, redhorse
MOXOSTOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5946 Body		Not applicable	3.27 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
5947 Body		Not applicable	<0.05 mg/kg	Chequamegon Bay, Lake Superior, WI, 8/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Walleye
STIZOSTEDION VITREUM VITREUM

Tissue	Cases Exposure Route	Range	Mean	General Information
5948 Body		a) Not applicable b) Not applicable c) Not applicable	a) <0.05 mg/kg b) 5.58 mg/kg c) <0.05 mg/kg	a) Wolf River, WI, 9/15/80 b) Fox River, WI, below DePere, 10/15/80 c) Chequamegon Bay, Lake Superior, WI, 8/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Arochlor 1260

11096-82-5

EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Bass, rock

AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5949 Body		Not applicable	0.15 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bat, little brown

MYOTIS LUCIFUGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5950 Brain	a) 5 b) 5 c) 2 d) 4 e) 10 f) 1 g) 7 Ingestion	a) 7.6-14 ppm b) 6.8-14 ppm c) 10-31 ppm d) 680-1500 ppm e) Not detected-110 ppm f) Not applicable g) Not detected-16 ppm Wet wt	a) 10.6 ppm b) 10.9 ppm c) 20.5 ppm d) 1170 ppm e) Not calculated f) 11,000 ppm g) Not calculated Wet wt	a) Baseline controls, died or killed on capture day 7/6/76 b) Baseline controls, died or killed 3-7 d after capture c) Fed 150 ppm for 3-4 d before death d) Fed 480 ppm for 5-28 d before death e) Starved after 40 d dosing on 150 ppm, deaths at 5-7 d f) Starved after 40 d dosing on 480 ppm, deaths at 4 d g) Starved controls, deaths at 2-10 d Means calculated by extractor. Detection limit 2.5 ppm. Maryland, Cecil County, North East In some, tremoring behavior GLC
5951 Carcass	a) 5 b) 5 c) 2 d) 4 e) 10 f) 1 g) 7 Ingestion	a) 55-120 ppm b) 170-670 ppm c) 260-430 ppm d) 160,000-260,000 ppm e) 20-15,000 ppm f) Not applicable g) 47-520 ppm	a) 82.5 ppm b) 346 ppm c) 345 ppm d) 212,500 ppm e) 3833 ppm f) 11,000 ppm g) 213 ppm Lipid wt	a) Baseline controls, died or killed on capture day 7/6/76 b) Baseline controls, died or killed 3-7 d after capture c) Fed 150 ppm for 3-4 d before death d) Fed 480 ppm for 5-28 d before death e) Starved after 40 d dosing on 150 ppm, deaths at 5-7 d f) Starved after 40 d dosing on 480 ppm, deaths at 4 d g) Starved controls, deaths at 2-10 d Means calculated by extractor. Detection limit 0.1 ppm. Maryland, Cecil County, North East In some, tremoring behavior GLC
DELIBERATE EXPOSURE; BATS; TERRESTRIAL; BRAIN; CARCASS; DDE; POLYCHLORINATED BIPHENYLS; PESTICIDES; PESTICIDE RESIDUES Clark, D.R.; Stafford, C.J. 1981 Journal of Toxicology and Environmental Health 7:925-934				

Arochlor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5952 Body		Not applicable	<0.05 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5953 Body		Not applicable	0.36 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, brown
ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5954 Body		Not applicable	<0.05 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Arochlor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bullhead, yellow
ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5955 Body		Not applicable	0.22 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
5956 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 0.29 mg/kg b) 1.51 mg/kg c) 4.70 mg/kg d) <0.05 mg/kg e) 3.72 mg/kg f) 0.06 mg/kg g) 0.62 mg/kg h) 0.35 mg/kg i) 0.96 mg/kg	a) Black River, OH, 10/21/81 b) Sheboygan River, WI, 9/30/80 c) Another sample, same as b) d) Menominee River, WI, 8/15/81 e) Kinnickinnic River, WI, 7/15/81 f) Wolf River, WI, 9/15/80 g) Fox River, WI, above DePere, 10/10/80 h) Same, except 11/15/81 i) Fox River, below DePere, 10/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Arochlor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
5957 Body	3-5/site	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) 0 mg/kg b) 0.014 mg/kg c) 0.045 mg/kg d) 0 mg/kg e) 0.022 mg/kg f) 0 mg/kg g) 0 mg/kg h) 0.026 mg/kg Lipid wt	a) San Joaquin River near Ft Washington b) At Firebaugh c) At Freemont Ford State Recreational Area d) Near Crow's Landing e) At South County Park f) Salt Slough below Lander Avenue g) Merced River below CA highway h) At George J. Hatfield State Recreational Area Organochlorine levels generally increased downstream, irrigated agriculture areas. July, 1981. Detection limit 0.020 mg/kg. California, San Joaquin Valley GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; PESTICIDES; INDUSTRIAL CHEMICALS; CALIFORNIA; CHLORDANE; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; WATER POLLUTION; INSECTICIDES; HERBICIDES; BODY Saiki, M.K.; Schmitt, C.J. 1986 Archives of Environmental Contamination and Toxicology 15:357-366				

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5958 Body		Not applicable	2.86 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
5959 Body		0.002-2.63 ug/g Wet wt	Not given	Study of 315 composite samples (3-5 adults of species) from 107 stations in more than 45 states, 1980-81. Range from total of 62 species. Maximum value in lipid wt=61.0 ug/g. Part of National Pesticides Monitoring Program. United States GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; UNITED STATES; PESTICIDES; PESTICIDE RESIDUES; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; TOXAPHENE; COMPARATIVE EVALUATIONS; WATER POLLUTION; BIOLOGICAL MONITORING Schmitt, C.J.; Zajicek, J.L.; Ribick, M.A. 1985 Archives of Environmental Contamination and Toxicology 14:225-260				

Arochlor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5960 Body		a) Not applicable b) Not applicable	a) <0.05 mg/kg b) 2.55 mg/kg	a) Ashtabula River, OH, 10/28/81 b) Sheboygan River WI, 9/30/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Sucker, redhorse
MOXOSTOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5961 Body		Not applicable	1.20 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
5962 Body		Not applicable	0.35 mg/kg	Chequamegon Bay, Lake Superior, WI, 8/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Arochlor 1260
11096-82-5
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Walleye
STIZOSTEDION VITREUM VITREUM

Tissue	Cases Exposure Route	Range	Mean	General Information
5963 Body		a) Not applicable b) Not applicable c) Not applicable	a) 0.32 mg/kg b) 0.46 mg/kg c) 0.14 mg/kg	a) Wolf River, WI, 9/15/80 b) Fox River, WI, below DePere, 10/15/80 c) Chequamegon Bay, Lake Superior, WI, 8/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Amphipod
GAMMARUS TIGRINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5964 Body	a) 26 b) 18 c) 98 d) 56 e) 46 f) 20 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 5.77+/-0.83 ug/g b) 23.05+/-2.74 ug/g c) 23.19+/-1.28 ug/g d) 14.90+/-1.05 ug/g e) 14.12+/-1.25 ug/g f) 8.42+/-1.08 ug/g Dry wt	a) 2 hr, uptake b) 9 hr, uptake c) 24 hr, uptake d) 24 hr, elimination e) 72 hr, elimination f) 144 hr, elimination Fed fungus, FUSARIUM OXYSPORUM labeled with 195.8+/-17.3 ug/g [C-14] arochlor 1254 for 24 hr. New York Scintillation counting
BODY; AMPHIPODS; AQUATIC; DELIBERATE EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; RADIOISOTOPES Pinkney, A.E.; Poje, G.V.; Sansur, R.M.; Lee, C.C.; O'Connor, J.M. 1985 Archives of Environmental Contamination and Toxicology 14:59-64				

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bass, rock
AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5965 Body		Not applicable	0.57 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5966 Body		Not applicable	1.85 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
5967 Body		Not applicable	0.33 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bullhead, brown
ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5968 Body		Not applicable	0.79 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, yellow
ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5969 Body		Not applicable	0.62 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
5970 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 0.57 mg/kg b) 15.79 mg/kg c) 42.37 mg/kg d) 0.42 mg/kg e) 8.25 mg/kg f) 0.09 mg/kg g) 4.10 mg/kg h) 2.15 mg/kg i) 7.03 mg/kg	a) Black River, OH, 10/21/81 b) Sheboygan River, WI, 9/30/80 c) Another sample, same as b) d) Menominee River, WI, 8/15/81 e) Kinnickinnic River, WI, 7/15/81 f) Wolf River, WI, 9/15/80 g) Fox River, WI, above DePere, 10/10/80 h) Same, except 11/15/81 i) Fox River, below DePere, 10/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5971 Body		Not applicable	5.32 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
5972 Body		0.00-4.20 ug/g Wet wt	Not given	Study of 315 composite samples (3-5 adults of species) from 107 stations in more than 45 states, 1980-81. Range from total of 62 species. Maximum value in lipid wt=87.5 ug/g. Part of National Pesticides Monitoring Program. United States GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; UNITED STATES; PESTICIDES; PESTICIDE RESIDUES; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; TOXAPHENE; COMPARATIVE EVALUATIONS; WATER POLLUTION; BIOLOGICAL MONITORING Schmitt, C.J.; Zajicek, J.L.; Ribick, M.A. 1985 Archives of Environmental Contamination and Toxicology 14:225-260				

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
5973 Body, whole		0.13-8.59 ppm	Not given	Composite sample from 22 watersheds near Great Lakes, 1978. Total of 26 samples collected, included 138 individuals: walleye, carp, white sucker, channel catfish, freshwater drum, quillback, stone roller, goldfish, brown trout, hog sucker, coho salmon. U.S. EPA Region V: Minnestota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, New York GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; MINNESOTA; WISCONSIN; MICHIGAN; OHIO; INDIANA; PENNSYLVANIA; NEW YORK; DDT; DDE; POLYCHLORINATED BIPHENYLS; HEPTACHLOR; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; OXYCHLORDANE; CHLORDANE; NONACHLOR Veith, G.D.; Kuehl, D.W.; Leonard, E.N.; Welch, K.; Pratt, G. 1981 Pesticides Monitoring Journal 15(1):1-8				

Hawk, red-tailed
BUTEO JAMAICENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5974 Muscle	6	Not applicable	4.37 ppm Wet wt	Collected 1971-78, 16.7% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; POLYCHLORINATED BIPHENYLS; ILLINOIS; BIOACCUMULATION; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; BRAIN; MUSCLES; LIVER; HEART; ADIPOSE TISSUE; PESTICIDES Havera, S.P.; Duzan, R.E. 1986 Bulletin of Environmental Contamination and Toxicology 36:23-32				

Hawk, rough-legged
BUTEO LAGOPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5975 Adipose	1	Not applicable	0.31 ppm Wet wt	Collected 1977-78, 100.0% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5976 Liver	2	Not applicable	3.02 ppm Wet wt	Collected 1977-78, 50.0% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC

(next page)

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Hawk, rough-legged
BUTEO LAGOPUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5977 Muscle	2	Not applicable	0.14 ppm Wet wt	Collected 1977-78, 50.0% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; POLYCHLORINATED BIPHENYLS; ILLINOIS; BIOACCUMULATION; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; BRAIN; MUSCLES; LIVER; HEART; ADIPOSE TISSUE; PESTICIDES Havera, S.P.; Duzan, R.E. 1986 Bulletin of Environmental Contamination and Toxicology 36:23-32				

Monkey, cynomolgus
MACACA FASCICULARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
5978 Adipose	8	a) 65.800-119.891 ppm b) 0.294-0.402 ppm c) 141.246-348.071 ppm d) 0.578-1.082 ppm e) 0-55 ppm	a) 88.551 ppm b) 1.354 ppm c) 207.507 ppm d) 0.748 ppm e) Not given	a) At sacrifice, treated for 1 yr, wet b) Controls, wet c) Treated oil d) Controls, oil e) Measured at 0, 2, and 4 mo during treatment Wildbred monkeys (wt 3.2-5.2 kg) treated with 200 ug/kg/d, 5 d/wk. Controls received dose vehicle. Means calculated by extractor, e) estimated from graph. Enlargement of tarsal glands, facial edema, nail lesions and detachment of nails with eventual regrowth. Mild dilation of tarsal gland ducts, moderately keratinized finger nail beds, and hepatocellular and biliary duct epithelial cell hypertrophy.
5979 Blood	8	a) 0.125-0.211 ppm b) 0.001-0.002 ppm c) 149.836-359.547 ppm d) 0.926-3.881 ppm e) 0-240 ppb	a) 0.165 ppm b) 0.002 ppm c) 250.578 ppm d) 2.295 ppm e) Not given	a) At sacrifice, treated for 1 yr, wet b) Controls, wet c) Treated oil d) Controls, oil e) During first 18 wk of treatment, peak at 16 wk Wildbred monkeys (wt 3.2-5.2 kg) treated with 200 ug/kg/d, 5 d/wk. Controls received dose vehicle. Means calculated by extractor, e) estimated from graph. Enlargement of tarsal glands, facial edema, nail lesions and detachment of nails with eventual regrowth. Mild dilation of tarsal gland ducts, moderately keratinized finger nail beds, and hepatocellular and biliary duct epithelial cell hypertrophy.

(next page)

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Monkey, cynomolgus
MACACA FASCICULARIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5980 Liver	8	a) 8.416-15.286 ppm b) 0.058-0.091 ppm c) 340.810-535.339 ppm d) 1.417-5.387 ppm	a) 12.152 ppm b) 0.076 ppm c) 398.981 ppm d) 4.202 ppm	a) Treated animals, wet b) Controls, wet c) Treated, oil d) Controls, oil At sacrifice, following treatment of wildbred monkeys (wt 3.2-5.2 kg) with 200 ug/kg/d, 5 d/wk, for 1 yr. Controls received dose vehicle. Means calculated by extractor. Enlargement of tarsal glands, facial edema, nail lesions and detachment of nails with eventual regrowth. Mild dilation of tarsal gland ducts, moderately keratinized finger nail beds, and hepatocellular and biliary duct epithelial cell hypertrophy.
MONKEYS; POLYCHLORINATED BIPHENYLS; COMPARATIVE EVALUATIONS; TERRESTRIAL; DELIBERATE EXPOSURE; AUTOPSIES; ADULTS; BLOOD; LIVER; ADIPOSE TISSUE Tryphonas, L.; Charbonneau, S.; Tryphonas, H.; Zawidzka, Z.; Mes, J.; Wong, J.; Arnold, D.L. 1986 Archives of Environmental Contamination and Toxicology 15:159-169				

Monkey, rhesus
MACACA MULATTA

Tissue	Cases Exposure Route	Range	Mean	General Information
5981 Adipose	8	0-95 ppm	Not given	Measured at 0, 2, and 4 mo of treatment with 200 ug/kg/d, 5 d/wk. Wildbred monkeys, wt 3.2-5.2 kg. Enlargement of tarsal glands, conjuctivitis, loss of eyelashes, facial edema, nail lesions and detachment of nails.
5982 Blood	8	0-280 ppb	Not given	Measured at during first 18 wk of treatment with 200 ug/kg/d, 5 d/wk. Wildbred monkeys, wt 3.2-5.2 kg. Enlargement of tarsal glands, conjuctivitis, loss of eyelashes, facial edema, nail lesions and detachment of nails.
MONKEYS; POLYCHLORINATED BIPHENYLS; COMPARATIVE EVALUATIONS; TERRESTRIAL; DELIBERATE EXPOSURE; AUTOPSIES; ADULTS; BLOOD; LIVER; ADIPOSE TISSUE Tryphonas, L.; Charbonneau, S.; Tryphonas, H.; Zawidzka, Z.; Mes, J.; Wong, J.; Arnold, D.L. 1986 Archives of Environmental Contamination and Toxicology 15:159-169				

Owl, barred
STRIX VARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
5983 Adipose	6	Not applicable	487.80 ppm Wet wt	Collected 1966-79, 16.7% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC

(next page)

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Owl, barred
STRIX VARIA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5984 Brain	11	Not applicable	3.26 ppm Wet wt	Collected 1966-79, 9.1% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5985 Heart	11	0.02-7.36 ppm Wet wt	3.69 ppm Wet wt	Collected 1966-79, 18.2% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5986 Liver	12	Not applicable	6.91 ppm Wet wt	Collected 1966-79, 8.3% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5987 Muscle	13	Not applicable	2.39 ppm Wet wt	Collected 1966-79, 7.7% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; POLYCHLORINATED BIPHENYLS; ILLINOIS; BIOACCUMULATION; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; BRAIN; MUSCLES; LIVER; HEART; ADIPOSE TISSUE; PESTICIDES Havera, S.P.; Duzan, R.E. 1986 Bulletin of Environmental Contamination and Toxicology 36:23-32				

Owl, great horned
BUBO VIRGINIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5988 Adipose	4	Not applicable	16.17 ppm Wet wt	Collected 1974-81, 25.0% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5989 Brain	14	Not applicable	13.10 ppm Wet wt	Collected 1974-81, 7.1% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5990 Heart	15	0.37-22.10 ppm Wet wt	10.82 ppm Wet wt	Collected 1974-81, 20.0% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5991 Liver	16	8.66-97.52 ppm Wet wt	46.81 ppm Wet wt	Collected 1974-81, 18.8% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC

(next page)

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Owl, great horned
BUBO VIRGINIANUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5992 Muscle	15	0.004-105.70 ppm Wet wt	25.29 ppm Wet wt	Collected 1974-81, 33.3% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; POLYCHLORINATED BIPHENYLS; ILLINOIS; BIOACCUMULATION; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; BRAIN; MUSCLES; LIVER; HEART; ADIPOSE TISSUE; PESTICIDES Havera, S.P.; Duzan, R.E. 1986 Bulletin of Environmental Contamination and Toxicology 36:23-32				

Owl, long-eared
ASIO OTUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5993 Brain	4	Not applicable	1.96 ppm Wet wt	Collected 1977-79, 25.0% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5994 Liver	3	Not applicable	7.22 ppm Wet wt	Collected 1977-79, 33.3% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; POLYCHLORINATED BIPHENYLS; ILLINOIS; BIOACCUMULATION; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; BRAIN; MUSCLES; LIVER; HEART; ADIPOSE TISSUE; PESTICIDES Havera, S.P.; Duzan, R.E. 1986 Bulletin of Environmental Contamination and Toxicology 36:23-32				

Owl, screech-, Eastern
OTUS ASIO

Tissue	Cases Exposure Route	Range	Mean	General Information
5995 Adipose	4	Not applicable	104.36 ppm Wet wt	Collected 1967-79, 25% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC
5996 Liver	10	Not applicable	3.81 ppm Wet wt	Collected 1967-79, 10.0% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC

(next page)

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Owl, screech-, Eastern
OTUS ASIO

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
5997 Muscle	8	0.12-0.13 ppm Wet wt	0.13 ppm Wet wt	Collected 1967-79, 20% contaminated. Raptors had been killed, disabled, or confiscated by law enforcement officers. Illinois GC-EC

CHLORINE ORGANIC COMPOUNDS; BIRDS; POLYCHLORINATED BIPHENYLS; ILLINOIS; BIOACCUMULATION; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; BRAIN; MUSCLES; LIVER; HEART; ADIPOSE TISSUE; PESTICIDES

Havera, S.P.; Duzan, R.E. 1986 Bulletin of Environmental Contamination and Toxicology 36:23-32

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
5998 Body		a) Not applicable b) Not applicable	a) 2.39 mg/kg b) 29.25 mg/kg	a) Ashtabula River, OH, 10/28/81 b) Sheboygan River WI, 9/30/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Prawn
MACROBRACHIUM ROSENBERGII

Tissue	Cases Exposure Route	Range	Mean	General Information
5999 Body	2000	a) Not given b) 0.29+/-0.05-0.60+/-0.05 ug/g c) 0.55+/-0.03-1.70+/-0.25 ug/g d) 0.66+/-0.12-1.60+/-0.00 ug/g Wet wt Ranges of means	a) 0.06+/-0.1 ug/g b) Not given c) Not given d) Not given Wet wt	a) Controls, 100% clean sand b) 10% contaminated sediment (v/v), measurements d 2 and d 70, peaks 0.96 ug/g d 50 c) 50% contaminated sediment, measurements d 2 and d 70, peak 2.90 ug/g d 50 d) 100% contaminated sediment, measurements d 2 and d 55, peaks 1.80 ug/g d 16, d 29, and d 40 Exposed for 50 d to sediment, from Sheboygan River, WI, containing environmental contaminants. 20 d depuration followed. Background levels in animals 0.01 ug/g wet wt.

MOLLUSKS; AQUATIC; DELIBERATE EXPOSURE; WATER POLLUTION; LEAD; CADMIUM; POLYCHLORINATED BIPHENYLS; JUVENILES; CRUSTACEANS

Tatem, H.E. 1986 Archives of Environmental Contamination and Toxicology 15:171-183

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Reindeer
RANGIFER sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6000 Body	2 Ingestion	392.6-452.4 ug	422.5 ug	Total burden in 3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 11100 ug. Means calculated by extractor. Sweden, Lake Rogen district
6001 Liver	2 Ingestion	7.8-11.1 ng/g	9.45 ng/mg	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 11100 ug. Means calculated by extractor. Lower value in 4-yr old. Sweden, Lake Rogen district
6002 Muscle	2 Ingestion	15.7-18.4 ng/g	17.05 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 11100 ug. Means calculated by extractor. Sweden, Lake Rogen district

ENVIRONMENTAL EXPOSURE; DEER; BODY; MUSCLES; LIVER; SWEDEN; TERRESTRIAL; FOOD CONTAMINATION; ANIMAL FEEDS; POLYCHLORINATED BIPHENYLS; DDD; DDE; LINDANE; HEXACHLOROBENZENE; PESTICIDES
Villeneuve, J.P.; Holm, E.; Cattini, C. 1985 Chemosphere 14(11/12):1651-1658

Sucker, redhorse
MOXOSTOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6003 Body		Not applicable	2.16 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
6004 Body		Not applicable	0.28 mg/kg	Chequamegon Bay, Lake Superior, WI, 8/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Trout, lake
SALVELINUS NAMAYCUSH

Tissue	Cases Exposure Route	Range	Mean	General Information
6005 Body	a) 15 b) 50 c) 6 d) 10 e) 7 f) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 11.58 mg/kg b) 5.63 mg/kg c) 2.92 mg/kg d) 2.10 mg/kg e) 1.87 mg/kg f) 0.48 mg/kg Wet wt	a) 1977, Lake Michigan, Saugatuck b) 1982 c) 1978, Lake Huron, off Rockport d) 1982 e) 1977, Lake Superior, off Apostle Islands f) 1982 Collection dates (fall) and sites 1977-1982 samples were composites of 5 fish each. Data included for additional years. Great Lakes, upper GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; POLYCHLORINATED BIPHENYLS; DDT; DIELDRIN; OXYCHLORDANE; GREAT LAKES; WATER POLLUTION; COMPARATIVE EVALUATIONS
DeVault, D.S.; Willford, W.A.; Hesselberg, R.J.; Nortrupt, D.A.; Rundberg, E.G.S.; Alwan, A.K.; Bautista, C. 1986 Archives of Environmental Contamination and Toxicology 15:349-356

Tissue	Cases Exposure Route	Range	Mean	General Information
6006 Fillets	3	1.146-1.225 ppm	1.194+/-0.0289 ppm	Included skin. Range, mean are of 10 replicates. Whole wt basis. % lipid was 17.1+/-0.084, range 16.95-17.25. Lake Michigan GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; FILLETS; MEASUREMENT METHODS; LAKE MICHIGAN; POLYCHLORINATED BIPHENYLS; OXYCHLORDANE; CHLORDANE; NONACHLOR; TOXAPHENE; HEPTACHLOR EPOXIDE; DDE; DDT; DDD; DIELDRIN; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; INDUSTRIAL CHEMICALS; WATER POLLUTION
Price, H.A.; Welch, R.L.; Scheel, R.H.; Warren, L.A. 1986 Bulletin of Environmental Contamination and Toxicology 37:1-9

Aroclor 1254
11097-69-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Walleye
STIZOSTEDION VITREUM VITREUM

Tissue	Cases Exposure Route	Range	Mean	General Information
6007 Body		a) Not applicable b) Not applicable c) Not applicable	a) 0.49 mg/kg b) 2.57 mg/kg c) 0.24 mg/kg	a) Wolf River, WI, 9/15/80 b) Fox River, WI, below DePere, 10/15/80 c) Chequamegon Bay, Lake Superior, WI, 8/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C
Bass

Tissue	Cases Exposure Route	Range	Mean	General Information
6008 Muscle		Not given	0.12 ug/g Wet wt	Recovery from freshwater fish. Unknown organic compound (0.087 ug/g) comprises 71% of total arsenic. Canada, Ontario Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
6009 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.06 ug/g b) 0.06 ug/g c) 0.02 ug/g d) 0.19 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Bayou Petite Prairie c) Spring Bayou d) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin AAS
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Bass, largemouth

MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
6010 Muscle	3	0.009-0.018 mg/kg Wet wt	0.013 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Bass, striped

MORONE SAXATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6011 Gonads	a) 9 b) 10	a) Not detected b) Not detected-0.50 ug/g	a) Not detected b) Not given	a) Collected 1978, Choptank River b) Collected April, 1979, Rock Hall, Chesapeake Bay. Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries Colorimetry
6012 Liver	a) 28 b) 10	Not detected-1.34 ug/g	0.59 ug/g	Collected May, 1978, Turkey Creek. Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries Colorimetry
6013 Muscle	a) 28 b) 10	a) Not detected-0.34 ug/g b) Not detected-0.87 ug/g	a) Not given b) Not given	a) Collected May, 1978, Turkey Point b) Collected April, 1979, Rock Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries Colorimetry
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Bird

Tissue	Cases Exposure Route	Range	Mean	General Information
6014 Eggs	20	Not detected-2.9 ppm Dry wt	Not given	Detected in 3/20 samples collected 1983 from Kesterson National Wildlife Refuge in Merced Co., in which agricultural drainage water is being used for marsh management. Species included American coot (FULICA AMERICANA), mallard (ANAS PLATYRHYNCHOS), northern pintail (A. ACUTA), cinnamon teal (A. CYANOPTERA), gadwall (A. STREPTERA), black-necked stilt (HIMANTOPUS MEXICANUS), American avocet (RECURVIROSTRA AMERICANA) and eared grebe (PODICEPS NIGRICOLLIS). California, San Joaquin Valley AAS
6015 Liver	a) 6 b) 6	a) Not detected-0.89 ppm b) Not detected-0.79 ppm Dry wt	a) 0.251 ppm b) Not given Dry wt Geometric	a) Detected in 3/6 samples collected 1983 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 1/6 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Detection limit 0.2 ppm dry wt. California, San Joaquin Valley AAS
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Birds, marsh

Tissue	Cases Exposure Route	Range	Mean	General Information
6016 Bone	a) 26 b) 28 c) 11 Ingestion	a) Not given b) Not given c) Not given	a) 12.80+/-0.80 mg/kg b) 8.75+/-1.43 mg/kg c) 5.35+/-0.76 mg/kg S.E. Wet wt	a) Mud-probing species, Pb shot in gizzard (5 individuals from HIMANTOPUS MEXICANUS, PLEGADIS CHIHI, LIMNODROMUS SCOLOPACEUS) b) Mud probers, no Pb in gizzards (TOTANUS FLAVIPES, EROLIA MINUTILLA, EROLIA MELANOTOS, EREUNETES MAURI, MACROPALAMA HIMANTOPUS, CATOTROPHORUS SEMIPALMATUS) c) Non-probers, no Pb in gizzard (RALLUS ELEGANS, GALLINULA CHLOROPUS, NYCTICORAX NYCTICORAX, CHLIDONIAS NIGER, BUBULCUS IBIS) Significantly higher ($p<0.05$), a) than b) or c). Texas, Chambers County ICP-AES

(next page)

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Birds, marsh

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6017 Feathers	a) 26 b) 28 c) 11 Ingestion	a) Not given b) Not given c) Not given	a) 8.87+/-0.73 mg/kg b) 4.84+/-0.70 mg/kg c) 12.09+/-3.33 mg/kg S.E. Dry wt	a) Mud-probing species, Pb shot in gizzard (5 individuals from HIMANTOPUS MEXICANUS, PLEGADIS CHIHI, LIMNODROMUS SCOLOPACEUS) b) Mud probers, no Pb in gizzards (TOTANUS FLAVIPES, EROLIA MINUTILLA, EROLIA MELANOTOS, EREUNETES MAURI, MACROPALAMA HIMANTOPUS, CATOTROPHORUS SEMIPALMATUS) c) Non-probers, no Pb in gizzard (RALLUS ELEGANS, GALLINULA CHLOROPUS, NYCTICORAX NYCTICORAX, CHLIDONIAS NIGER, BUBULCUS IBIS) Significantly higher ($p<0.05$), a) and c) than b). Texas, Chambers County ICP-AES
6018 Liver	a) 26 b) 28 c) 11 Ingestion	a) Not given b) Not given c) Not given	a) 4.48+/-0.76 mg/kg b) 5.09+/-0.45 mg/kg c) 3.63+/-0.37 mg/kg S.E. Wet wt	a) Mud-probing species, Pb shot in gizzard (5 individuals from HIMANTOPUS MEXICANUS, PLEGADIS CHIHI, LIMNODROMUS SCOLOPACEUS) b) Mud probers, no Pb in gizzards (TOTANUS FLAVIPES, EROLIA MINUTILLA, EROLIA MELANOTOS, EREUNETES MAURI, MACROPALAMA HIMANTOPUS, CATOTROPHORUS SEMIPALMATUS) c) Non-probers, no Pb in gizzard (RALLUS ELEGANS, GALLINULA CHLOROPUS, NYCTICORAX NYCTICORAX, CHLIDONIAS NIGER, BUBULCUS IBIS) No significant ($p<0.05$) differences. Texas, Chambers County ICP-AES

BONES; FEATHERS; LIVER; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; ARSENIC; LEAD; ACCIDENTAL POISONING; METALS

Hall, S.L.; Fish, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:1-8

Bluegill

LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6019 Muscle	2	0.005-0.007 mg/kg Wet wt	0.006 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Bowfin
AMIA CALVA

Tissue	Cases Exposure Route	Range	Mean	General Information
6020 Body, whole		a) Not given b) Not given c) Not given	a) 0.04 ug/g b) 0.03 ug/g c) 0.07 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Bayou Petite Prairie Collected 6/81. Louisiana, Atchafalaya River Basin AAS
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Buffalo, smallmouth
ICTIOBUS BUBALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6021 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.07 ug/g b) 0.03 ug/g c) 0.05 ug/g d) 0.07 ug/g Wet wt Geometric	a) Composite sample from Lake Fausse Point b) Bayou Petite Prairie c) Spring Bayou d) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin AAS
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Burbot
LOTA LOTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6022 Body		a) Not given b) 0.05-0.05 ug/g c) 6.7-7.0% d) Not given e) 0.03-0.03 ug/g f) 10.0-11.4% Wet wt	a) 0.70+/-0.10 ug/g b) Not given c) Not given d) 0.28+/-0.01 ug/g e) Not given f) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish polluted, % total as inorganic form d) Brackish unpolluted, total e) Brackish unpolluted, inorganic form f) Brackish unpolluted, % total as inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Burbot
LOTA LOTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6023 Body	a) 5 b) 5 c) 5 d) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.70+/-0.10 ug/g b) 0.05 ug/g c) 0.28+/-0.01 ug/g d) 0.03 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water, total As d) Inorganic As In 6 species examined, fish from polluted water had 1.4-5 times higher levels, 5-12% of which was the inorganic form. Sweden AAS
BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Tissue	Cases Exposure Route	Range	Mean	General Information
6024 Liver		a) Not given b) 0.02-0.02 ug/g c) 1.4-1.6% d) Not given e) 0.05-0.06 ug/g f) 6.2-6.5% Wet wt	a) 1.5+/-0.29 ug/g b) Not given c) Not given d) 0.85+/-0.09 ug/g e) Not given f) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish polluted, % total as inorganic form d) Brackish unpolluted, total e) Brackish unpolluted, inorganic form f) Brackish unpolluted, % total as inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Tissue	Cases Exposure Route	Range	Mean	General Information
6025 Liver	a) 5 b) 5 c) 5 d) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 1.5+/-0.29 ug/g b) 0.02 ug/g c) 0.85+/-0.09 ug/g d) 0.05 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water, total As d) Inorganic As 1-6% As inorganic form. Sweden AAS
BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
6026 Muscle		Not given	0.18 ug/g Wet wt	Recovery from freshwater fish. Unknown organic compound (0.13 ug/g) comprises 72% of total arsenic. Canada, Ontario Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Catfish
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6027 Muscle	2	0.006-0.008 mg/kg Wet wt	0.007 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6028 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.03 ug/g b) 0.03 ug/g c) 0.08 ug/g d) 0.04 ug/g e) 0.03 ug/g f) 0.05 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Little Pigeon Bayou d) Grand Lake e) Henderson Lake f) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin AAS

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS

Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Cattle

BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6029 Kidney	90	a) 0.8-84 mg/kg b) Not detected Wet wt	a) Not given b) Not given	a) 2 cases b) 88 cases Detection limit 1.0 mg/L. Mineral profile, 1981-83. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Tissue	Cases Exposure Route	Range	Mean	General Information
6030 Kidney	1 Ingestion	Not applicable	23.7 ug/g Wet wt	Hereford X Angus which had died after licking wood ashes containing 780 ug/g. 5 other cows also became ill. Treatment included sulfamethazine, B vitamins, fluid electrolytes, bismuth subsalicylate and mineral oil. 4 died. Diarrhea, recumbency, abdominal pain Hemorrhages, mucosal destruction, congested blood vessels and abnormal epithelial cells in kidney AAS

LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; AUTOPSIES; METAL POISONING; ARSENIC; COPPER; CHROMIUM; ACCIDENTAL POISONING

Thatcher, C.D.; Meldrum, J.B.; Wikse, S.E.; Whittier, W.D. 1985 Journal of the American Veterinary Medical Association 187(2):179-182

Tissue	Cases Exposure Route	Range	Mean	General Information
6031 Liver	229	a) 1-76 mg/kg b) Not detected Wet wt	a) Not given b) Not given	a) 5 cases b) 224 cases Detection limit 1.0 mg/L. Mineral profile, 1981-83. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6032 Liver	1 Ingestion	Not applicable	13.9 ug/g Wet wt	Hereford X Angus which had died after licking wood ashes containing 780 ug/g. 5 other cows also became ill. Treatment included sulfamethazine, B vitamins, fluid electrolytes, bismuth subsalicylate and mineral oil. 4 died. Diarrhea, recumbency, abdominal pain Hemorrhages, mucosal destruction, congested blood vessels and abnormal epithelial cells in kidney AAS
LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; AUTOPSIES; METAL POISONING; ARSENIC; COPPER; CHROMIUM; ACCIDENTAL POISONING Thatcher, C.D.; Meldrum, J.B.; Wikse, S.E.; Whittier, W.D. 1985 Journal of the American Veterinary Medical Association 187(2):179-182				

Tissue	Cases Exposure Route	Range	Mean	General Information
6033 Milk	a) 2 b) 2 c) 2 d) 2 Ingestion	a) 0.08-0.08 ug/g b) 0.08-0.21 ug/g c) 0.08-0.14 ug/g d) 0.08-0.10 ug/g Dry wt	a) Not given b) Not given c) Not given d) Not given	a) 0 and 5 d of 1.6 mg/kg/d As as arsanilic acid, 0.10 after 7-d withdrawal b) Same as a) except dose was 3.2 mg/kg/d, level after withdrawal was 0.07 c) Same as a) except As as 3-nitro-4-hydroxyphenylarsonic acid, level after withdrawal was 0.11 d) Same as c) except dose was 3.2 mg/kg/d, level after withdrawal was 0.09 Total As consumed for each group was 0.86, 1.75, 0.92, 2.06 g/cow/d, respectively. AAS
DELIBERATE EXPOSURE; TERRESTRIAL; ARSENIC; SHEEP; CATTLE; LIVER; KIDNEYS; MUSCLES; BLOOD; MILK; BIOACCUMULATION; FOOD CONTAMINATION Calver, C.C.; Smith, L.W. 1981 Journal of Animal Science 51(2):414-421				

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6034 Body		a) Not given b) Not given	a) 0.14+/-0.01 ppm b) 0.172+/-0.06 ppm Wet wt	Samples collected from entrance of the Chef Menteur Pass Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS
MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Clam (H. hippopus)
HIPPOPUS HIPPOPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6035 Digestive tract		Not given	65 ppm Dry wt	From Lizard Island (14 deg, 42' S), Great Barrier Reef. Australia AAS
6036 Gonads		Not given	21 ppm Dry wt	From Lizard Island (14 deg, 42' S), Great Barrier Reef. Australia AAS
6037 Kidney	2	481-561 ppm Dry wt	521 ppm Dry wt	From Lizard Island (14 deg, 42' S), Great Barrier Reef. Assumed to be 2 cases, mean calculated by extractor. Australia AAS
6038 Zooxanthellae	2	15-16 ppm Dry wt	15.5 ppm Dry wt	From Lizard Island (14 deg, 42' S), Great Barrier Reef. Assumed to be 2 cases, mean calculated by extractor. Australia AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION

Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483

Clam (T. derasa)
TRIDACNA DERISA

Tissue	Cases Exposure Route	Range	Mean	General Information
6039 Digestive tract		Not given	26 ppm Dry wt	From Davies Reef (18 deg 51' S), Great Barrier Reef. Australia AAS
6040 Gills	2	Not given	5.2, 24.8 ppm Dry wt	From Davies Reef (18 deg 51' S), Great Barrier Reef. Assumed to be two separate collections. Australia AAS
6041 Gonads		Not given	22 ppm Dry wt	From Davies Reef (18 deg 51' S), Great Barrier Reef. Australia AAS
6042 Kidney	6	611-1025 ppm Dry wt	736 ppm Dry wt	From Davies Reef (18 deg 51' S), Great Barrier Reef. Assumed to be 6 cases, mean calculated by extractor. Australia AAS

(next page)

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Clam (T. derasa)
TRIDACNA DERISA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6043 Muscle	2	11.6-12.3 ppm Dry wt	16.9 ppm Dry wt	From Davies Reef (18 deg 51' S), Great Barrier Reef. Assumed to be 2 cases, mean calculated by extractor. Australia AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483				

Clam (T. maxima)
TRIDACNA MAXIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
6044 Kidney	2	953-1004 ppm Dry wt	979 ppm Dry wt	From Lizard Island (14 deg, 42' S), Great Barrier Reef. Assumed to be 2 cases, mean calculated by extractor. Australia AAS
6045 Muscle	2	12-25 ppm Dry wt	19 ppm Dry wt	From Lizard Island (14 deg, 42' S), Great Barrier Reef. Assumed to be 2 cases, mean calculated by extractor. Australia AAS
6046 Zooxanthellae		Not given	33 ppm Dry wt	From Lizard Island (14 deg 42' S), Great Barrier Reef. Australia AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483				

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
6047 Body	17	1.0-8.2 mg/kg Wet wt	4.3 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-84. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
6048 Muscle		a) Not given b) Not given	a) 5.1 ug/g b) 7.4 ug/g Wet wt	a) Atlantic Ocean b) Pacific Ocean Recovery (total arsenic) from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Coot, American
FULICA AMERICANA

Tissue	Cases Exposure Route	Range	Mean	General Information
6049 Kidney	a) 20 b) 10 c) 80 d) 40	a) Not detected-0.3 ppm b) Not detected-0.6 ppm c) Not detected-1.7 ppm d) Not detected-0.07 ppm Wet wt	a) 0.05 ppm b) 0.04 ppm c) 0.05 ppm d) 0.02 ppm Wet wt Geometric	a) 1 yr before startup, power plant site b) Control site, same as a) c) Range from 6 mo-2 yr post-startup, power plant site d) Control site, same as c) Values in c), d) Compiled by extractor Study was to determine levels at coal-fired power plant ash pond and control site (Port Mansfield). Pre-startup samples in 3, 10, 11/79 and post-startup samples for 2 yr after 10/80. Detection limits, entire study, 0.1-0.2 ppm. Texas Goliad County, Fannin, Texas, Port Mansfield AAS

ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; FOSSIL FUELED POWER PLANTS; TEXAS; COPPER; ZINC; NICKEL; CADMIUM; MERCURY; MOLYBDENUM; LEAD; ARSENIC; SELENIUM; KIDNEYS; BONES; LIVER

White, D.H.; King, K.A.; Mitchell, C.A.; Mulhern, B.M. 1986 Bulletin of Environmental Contamination and Toxicology 36:376-383

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6050 Muscle	2	0.05-0.05 mg/kg Wet wt	0.005 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6051 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.10 ug/g b) 0.06 ug/g c) 0.11 ug/g d) 0.03 ug/g e) 0.05 ug/g f) 0.14 ug/g Wet wt Geometric	a) Composite samples from Lake Fausse Point b) Little Pigeon Bayou c) Henderson Lake d) Bayou Petite Prairie e) Spring Bayou f) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin AAS

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Crustacean (G. oceanicus)
GAMMARUS OCEANICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6052 Muscle		a) Not given b) Not given	a) 14.5 ug/g b) 5.5 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS

DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES
Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345

Crustacean (I. baltica)
IDOTEA BALTICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6053 Muscle		a) Not given b) Not given	a) 18.5 ug/g b) 6.8 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS

DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES
Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Crustacean (P. adspersus)
PALAEMON ADSPERSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6054 Muscle		a) Not given b) Not given	a) 9 ug/g b) 0 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345				

Didemnid, brown-coated
DIDEMNUM TERNATANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
6055 Body		Not given	39 ppm Dry wt	From Lizard Island (14 deg 42' S), Great Barrier Reef. Australia AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483				

Didemnid, pink-coated
DIDEMNUM TERNATANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
6056 Body	3	146-226 ppm Dry wt	175 ppm Dry wt	From Lizard Island (14 deg 42' S), Great Barrier Reef. Assumed to be 3 cases, mean calculated by extractor. Australia AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483				

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Duck, mottled
ANAS FULVIGULA

Tissue	Cases Exposure Route	Range	Mean	General Information
6057 Bone	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 11.0+/-2.1 mg/kg b) 9.6+/-1.5 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.001$). Texas, Chambers County ES
6058 Feathers	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 12.7+/-1.7 mg/kg b) 13.3+/-1.7 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Dunlin
CALIDRIS ALPINA

Tissue	Cases Exposure Route	Range	Mean	General Information
6059 Feathers		<0.5-5 mg/kg	Not applicable	Adults, all primary vane levels, except 3, were >1.0 mg/kg (mode). (Juveniles, not given here, were <1.0 mg/kg with 1 exception.) Birds collected in same physiological conditions with respect to molting, Waddenzee, 9/11/82. Waddenzee estuary polluted by Rhine and Scheldt Rivers. Netherlands NA

(next page)

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Dunlin
CALIDRIS ALPINA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6060 Kidney		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) <0.35 mg/kg b) 2.7 mg/kg c) 3.3 mg/kg d) 6.6 mg/kg e) 2.5 mg/kg f) 3.7 mg/kg g) 3.1 mg/kg Dry wt	a) "Controls", Swedish birds sampled in migration, Ottenby, Sweden, 8/82 b) Collected shortly after arrival, western Waddenzee, 8/82 c) 9/82 d) 10/82 e) Collected eastern Waddenzee, 9/82 f) 10/82 g) 11/82 Waddenzee estuary polluted by Rhine and Scheldt Rivers. Some values estimated from graph. Detection limit=0.35 mg/kg. Netherlands NA
6061 Uropygial gland		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) <0.20 mg/kg b) 0.9 mg/kg c) 0.9 mg/kg d) 2.0 mg/kg e) 0.5 mg/kg f) 1.05 mg/kg g) 0.9 mg/kg Dry wt	a) "Controls", Swedish birds sampled in migration, Ottenby, Sweden, 8/82 b) Collected shortly after arrival, Western Waddenzee, 8/82 c) 9/82 d) 10/82 e) Collected eastern Waddenzee, 9/82 f) 10/82 g) 11/82 Waddenzee estuary polluted by Rhine and Scheldt Rivers. Estimated from graph. Detection limit=0.20 mg/kg. Netherlands NA

KIDNEYS; UROPYGIAL GLAND; FEATHERS; WATERFOWL; AQUATIC; NETHERLANDS; JUVENILES; ADULTS; METAL POISONING; ARSENIC; BIOACCUMULATION; WATER POLLUTION; BIRDS

Goede, A.A.; de Bruin, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:617-622

Eel
ANGUILLA ANGUILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6062 Body	15	0.03-0.25 mg/kg Wet wt	0.15 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Lake IJssel, 1978-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Eel, American
ANGUILLA ROSTRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6063 Muscle	2	0.007-0.008 mg/kg Wet wt	0.008 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
6064 Body, whole	1830-3050	a) 0.04-2.08 ug/g b) 0.05-1.69 ug/g Wet wt	a) 0.16 ug/g b) 0.14 ug/g Geometric mean Wet wt	a) 1978-79 b) 1980-81 Extensive data given for 60 freshwater species at 112 sites. Composite samples of 3-5 fish. Part of National Contaminant Biomonitoring Program. United States AAS

BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED STATES; COMPARATIVE EVALUATIONS; LEAD; MERCURY; CADMIUM; ARSENIC; SELENIUM; COPPER; ZINC; BIOLOGICAL MONITORING; METALS; WATER POLLUTION

Lowe, T.P.; May, T.W.; Brumbaugh, W.G.; Kane, D.A. 1985 Archives of Environmental Contamination and Toxicology 14:363-388

Tissue	Cases Exposure Route	Range	Mean	General Information
6065 Muscle				Review dealing with quality of data on trace metals in marine samples.

ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS

Topping, G. 1986 Science of the Total Environment 49:9-25

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Bass

Tissue	Cases Exposure Route	Range	Mean	General Information
6066 Muscle	a) 127 b) 80	a) Not detected-0.80 ug/g b) Not detected-0.87 ug/g	a) Not detected b) 0.09 ug/g	a) Collected 1978 b) Collected 1979 Detection limit 0.01 ug/g. Means calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries Colorimetry

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102

Flatworm

PLANARIA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6067 Muscle		a) Not given b) Not given	a) 34.5 ug/g b) 4 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS

DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES

Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Gadwall
ANAS STREPERA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6069 Feathers	a) 61 b) 2 Ingestion	a) Not given b) Not given	a) 45.1+/-2.7 mg/kg b) 39.5+/-12.4 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Gar, spotted
LEPISOSTEUS OCULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6070 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.04 ug/g b) 0.06 ug/g c) 0.05 ug/g d) 0.03 ug/g e) 0.03 ug/g f) 0.02 ug/g g) 0.01 ug/g h) 0.09 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Little Pigeon Bayou d) Grand Lake e) Henderson Lake f) Bayou Petite Prairie g) Spring Bayou h) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin AAS
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Gastropod (L. peregra)
LYMNEA PEREGRA

Tissue	Cases Exposure Route	Range	Mean	General Information
6071 Body, whole		a) Not given b) Not given	a) 7 ug/g b) 5.5 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS

(next page)

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Gastropod (L. peregra)
LYMNEA PEREGRA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6072 Muscle		a) Not given b) Not given	a) 11.9 ug/g b) 11.9 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
6073 Shell		a) Not given b) Not given	a) 0.5 ug/g b) 0.3 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345				

Gastropod (T. fluviatilis)
THEODOXUS FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6074 Body		a) Not given b) Not given	a) 4 ug/g b) 3 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Godwit, bar-tailed
LIMOSA LAPPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6075 Feathers	a) 10 b) 10 c) 10 d) 9 e) 5 f) 3	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Not detected b) 0.56+/-0.26 mg/kg c) 0.51+/-0.10 mg/kg d) 0.47+/-0.17 mg/kg e) 3.17+/-0.93 mg/kg f) 0.87+/-0.48 mg/kg	a) Juveniles, 1979-1982 b) Adults, 1980, Schiermonnikoog, female c) Male d) Adults, 1981, Schiermonnikoog, male e) Adults, 1979-1982, Vlieland, female f) Male Age, year and location of collection and sex. Juvenile primaries and adult No. 8 primaries analyzed. Limit of detection 0.11+/-0.24 mg/kg.
6076 Kidney	10	2.7-5.4 mg/kg Dry wt	Not given	Dutch Wadden Sea NA Estimated from graph. Dutch Wadden Sea NA
6077 Liver	10	4-10.5 mg/kg Dry wt	Not given	Estimated from graph. Dutch Wadden Sea NA

FEATHERS; LIVER; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; METALS; MERCURY; ARSENIC; SELENIUM; ZINC; BIOACCUMULATION; WATER POLLUTION

Goede, A.A. 1985 Environmental Pollution (Series A) 37:287-309

Haddock
MELANOGRAMMUS AEGLEFINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6078 Muscle		a) Not given b) Not given	a) 6.0 ug/g b) 3.5 ug/g Wet wt	a) Atlantic Ocean b) Locally purchased in Ottawa Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (*sublimes*), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Halibut

Tissue	Cases Exposure Route	Range	Mean	General Information
6079 Muscle		a) 1.5-4 ug/g b) Not given Wet wt	a) Not given b) 2.3 ug/g Wet wt	a) Atlantic Ocean b) Pacific Ocean Recovery (total arsenic) from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Herring

CLUPEA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6080 Muscle		a) Not given b) Not given	a) 1.1 ug/g b) 1.0 ug/g Wet wt	a) Atlantic Ocean b) Pacific Ocean Recovery (total arsenic) from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Herring, Baltic

CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6081 Body		a) Not given b) 0.06-0.09 ug/g c) 4.1-5.9% d) Not given e) 0.09-0.15 ug/g f) 7.6-12.9% Wet wt	a) 1.6+/-0.51 ug/g b) Not given c) Not given d) 1.2+/-0.16 ug/g e) Not given f) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish polluted, % total as inorganic form d) Brackish unpolluted, total e) Brackish unpolluted, inorganic form f) Brackish unpolluted, % total as inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Herring, Baltic

CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6082 Body	a) 5 b) 5 c) 5 d) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 1.6+/-0.51 ug/g b) 0.09 ug/g c) 1.2+/-0.16 ug/g d) 0.15 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water, total As d) Inorganic As In 6 species examined, fish from polluted water had 1.4-5 times higher levels, 5-12% of which was the inorganic form. Sweden AAS

BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION

Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334

Tissue	Cases Exposure Route	Range	Mean	General Information
6083 Body	14	1.3-4.6 mg/kg Wet wt	2.8 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Honeybee

APIS MELLIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
6084 Body		<0.5-12.5 ppm	Not given	Measurements at Whidbey Island and Commencement Bay. Washington, Puget Sound AAS

BODY; BEES; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; WASHINGTON; ARSENIC; FLUORIDE; CADMIUM; AIR POLLUTION; BIOLOGICAL MONITORING; DUST; LAND POLLUTION; PARTICULATES; RURAL AREAS; URBAN AREAS

Bromenshenk, J.J.; Carlson, S.R.; Simpson, J.C.; Thomas, J.M. 1985 Science 227:632-634

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Hydrobia

Tissue	Cases Exposure Route	Range	Mean	General Information
6085 Body		a) Not given b) Not given	a) 5 ug/g b) 3.5 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS

DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES

Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345

Insect

Tissue	Cases Exposure Route	Range	Mean	General Information
6086 Liver	a) 10 b) 13	a) 0.66-5.9 ppm b) Not detected-2.9 ppm Dry wt	a) 1.26 ppm b) 0.880 ppm Dry wt Geometric	a) Detected in 10/10 composite samples of aquatic insects collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 12/13 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. Detection limit was 0.2 ppm dry wt. California, San Joaquin Valley AAS

BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC

Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63

Knot

CALIDRIS CANUTUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6087 Feathers	a) 14 b) 20 c) 2	a) Not given b) Not given c) Not given	a) Not detected b) 1.03+/-0.59 mg/kg c) 0.49+/-0.07 mg/kg	a) Juveniles, 1979-1982 b) Adults, 1979, Schiermonnikoog c) Adults, 1979-1982, Vlieland Age, year and location of collection. Juvenile primaries and adult No. 8 primaries analyzed. Limit of detection 0.18+/-0.29 mg/kg. Dutch Wadden Sea NA

(next page)

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Knot
CALIDRIS CANUTUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6088 Kidney		Not applicable	10.5 mg/kg Dry wt	Estimated from graph. Dutch Wadden Sea NA
6089 Liver		Not applicable	14.5 mg/kg Dry wt	Estimated from graph. Dutch Wadden Sea NA
FEATHERS; LIVER; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; METALS; MERCURY; ARSENIC; SELENIUM; ZINC; BIOACCUMULATION; WATER POLLUTION Goede, A.A. 1985 Environmental Pollution (Series A) 37:287-309				

Lobster

Tissue	Cases Exposure Route	Range	Mean	General Information
6090 Liver				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Tissue	Cases Exposure Route	Range	Mean	General Information
6091 Muscle		a) Not given b) Not given	a) 5.2 ug/g b) 4.7 ug/g Wet wt	a) Atlantic Ocean b) Locally purchased in Ottawa Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Mackerel

PNEUMATOPHORUS JAPONICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6092 Muscle		Not given	0.55 ug/g Wet wt	Recovery (total arsenic) from seafood samples from Atlantic Ocean, Canadian coastal waters. Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Molluscs

Tissue	Cases Exposure Route	Range	Mean	General Information
6093 Body		5-17 ppm Dry wt	Not given	Temperate-water species, Jervis Bay, southern New South Wales (35 deg, 5' S): OSTREA ANGASI, SACCOSTREA COMMERCIALIS, PECTIN FUMATUS, CHLAMYS ASPERRIMA, MYTILUS sp. Australia AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION

Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483

Mosquitofish

GAMBUSIA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6094 Body	a) 2 b) 4	a) 0.42-0.43 ppm b) 0.47-0.88 ppm Dry wt	a) 0.426 ppm b) 0.664 ppm Dry wt Geometric	a) Detected in 2/2 composite samples collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 4/4 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. California, San Joaquin Valley AAS

BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC

Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Mother-of-pearl

PINCTADA MARGARITIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
6095 Body		Not given	70 ppm Dry wt	From Lizard Island (14 deg 42' S), Great Barrier Reef. Australia AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION

Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483

Mussel (Cardium)

CARDIUM sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6096 Body		a) Not given b) Not given	a) 2 ug/g b) 0.5 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
6097 Muscle		a) Not given b) Not given	a) 33 ug/g b) 11 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
6098 Shell		a) Not given b) Not given	a) 0.5 ug/g b) 0 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS

DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES

Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Mussel, blue

MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6099 Body		a) 9.4-15 ug/g b) 9.8-16 ug/g Dry wt	a) 11.9 ug/g b) 12.8 ug/g Dry wt	a) Gonadal tissue, range: values at 7/17/81 and 2/17/80 b) Somatic tissue, range: values at 5/21/81 and 11/18/80 All values calculated by extractor from total burdens and wt given in table. Total of 11 collections at uncontaminated site 9/80-9/81. Levels varied with season and reproductive state. Gametogenesis and spawning in 4 and 7/81. Oregon, Newport, Yaquina Bay NA
ENVIRONMENTAL EXPOSURE; MUSSELS; MOLLUSKS; AQUATIC; BODY; GONADS; MANGANESE; NICKEL; COPPER; ZINC; CADMIUM; ARSENIC; WATER POLLUTION; METALS; OREGON La Touche, Y.D.; Mix, M.C. 1982 Bulletin of Environmental Contamination and Toxicology 29.665-670				

Tissue	Cases Exposure Route	Range	Mean	General Information
6100 Body		a) Not given b) Not given	a) 2.7 ug/g b) 2 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345				

Tissue	Cases Exposure Route	Range	Mean	General Information
6101 Body	17	1.4-4.6 mg/kg Wet wt	2.5 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Eastern Scheldt, 1978-84. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6102 Muscle		a) Not given b) Not given	a) 26 ug/g b) 11 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
6103 Shell		a) Not given b) Not given	a) 1.0 ug/g b) 0.2 ug/g Dry wt	a) Exposed to 7.5 ug/L for 85 days 25 cases b) Unexposed controls Mesocosm experiment in simulated littoral ecosystem. Seaweed, FUCUS accumulated most of As. Values estimated from graph. Baltic Sea AAS
DELIBERATE EXPOSURE; AQUATIC; ARSENIC; BODY; MUSCLES; SHELL; WATER POLLUTION; BIOACCUMULATION; BALTIC SEA; MOLLUSKS; PLANARIA; CRUSTACEANS; POLYCHETES Rosemarin, A.; Notini, M.; Holmgren, K. 1985 Ambio 14(6):342-345				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6104 Body		Not given	0.16+/-0.08 ppm Wet wt	Samples collected from entrance of the Inner Harbor Navigation Canal at Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS
MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158				

Oyster, Pacific
CRASSOSTREA GIGAS

Tissue	Cases Exposure Route	Range	Mean	General Information
6105 Body	a) 328 b) 226	a) <0.1-1.1 ug/g b) <0.1-4.5 ug/g Wet wt	a) 0.8 ug/g b) 1.6 ug/g Wet wt	a) Collected live from 8 sites in bay. 2 groups with <0.01 not included in mean b) Collected from 10 stalls in Lau Fau Shan Market. 7 groups with <0.01 not included in mean Range of means from table, means given here calculated by extractor. China, Hong Kong, New Territories (NW), Deep Bay Gutzeit method
ENVIRONMENTAL EXPOSURE; BODY; OYSTERS, ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; ZINC; METALS; WATER POLLUTION; CHINA; MOLLUSKS Phillips, D.J.H.; Ho, C.T.; Ng, L.H. 1982 Archives of Environmental Contamination and Toxicology 11:533-537				

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Oyster, rock
SACCOSTREA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6106 Body		Not given	58 ppm Dry wt	From Lizard Island (14 deg, 42' S), Great Barrier Reef. Australia AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483				

Pelican, brown
PELECANUS OCCIDENTALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6107 Kidney	10	0.21-0.92 ppm Dry wt	Not given	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.05 ppm wet wt. California AAS
6108 Liver	10	0.32-0.72 ppm Dry wt	Not given	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.05 ppm wet wt. California AAS
ADIPOSE TISSUE; MUSCLES; BODY; LIVER; KIDNEYS; FEATHERS; BONES; PANCREAS; GONADS; PELICANS; AQUATIC; ENVIRONMENTAL EXPOSURE; CALIFORNIA; METAL POISONING; ARSENIC; CADMIUM; CHROMIUM; COPPER; MERCURY; LEAD; SELENIUM; ZINC; DDE; BIOACCUMULATION Ohlendorf, H.M.; Anderson, D.; Boellstorff, D.E.; Mulhern, B.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:183-192				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6109 Body		a) Not given b) 0.02-0.02 ug/g c) Not given d) 0.02-0.02 ug/g e) Not given f) 0.01-0.01 ug/g g) Not given h) 0.01-0.01 ug/g Wet wt	a) 0.21+/-0.05 ug/g b) Not given c) 0.14+/-0.06 ug/g d) Not given e) 0.05+/-0.03 ug/g f) Not given g) 0.08+/-0.05 ug/g h) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish unpolluted, total d) Brackish unpolluted, inorganic form e) Fresh polluted, total f) Fresh polluted, inorganic form g) Fresh unpolluted, total h) Fresh unpolluted, inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Tissue	Cases Exposure Route	Range	Mean	General Information
6110 Body	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5 g) 5 h) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.21+/-0.05 ug/g b) 0.02 ug/g c) 0.14+/-0.06 ug/g d) 0.02 ug/g e) 0.05+/-0.03 ug/g f) 0.01 ug/g g) 0.08+/-0.05 ug/g h) 0.01 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water, total As d) Inorganic As e) Fresh polluted water, total As f) Inorganic As g) Fresh unpolluted water, total As h) Inorganic As In 6 species examined, fish from polluted water had 1.4-5 times higher levels, 5-12% of which was the inorganic form. Sweden AAS
BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6111 Liver		a) Not given b) 0.07-0.06 ug/g c) Not given d) 0.02-0.03 ug/g e) Not given f) Not given Wet wt	a) 1.8+/-0.48 ug/g b) Not given c) 1.5+/-0.55 ug/g d) Not given e) 0.14+/-0.08 ug/g f) 0.12+/-0.06 ug/g Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish unpolluted, total d) Brackish unpolluted, inorganic form e) Fresh polluted, total f) Fresh unpolluted, total Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Tissue	Cases Exposure Route	Range	Mean	General Information
6112 Liver	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.8+/-0.48 ug/g b) 0.07 ug/g c) 1.5+/-0.55 ug/g d) 0.02 ug/g e) 0.14+/-0.08 ug/g f) 0.12+/-0.06 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water total As d) Inorganic As e) Fresh polluted water, total As f) Fresh unpolluted water, total As 1-3% as inorganic form in brackish water fish. Sweden AAS
BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Perch, striped

Tissue	Cases Exposure Route	Range	Mean	General Information
6113 Muscle		Not given	0.24 ug/g Wet wt	Recovery from freshwater fish. Unknown organic compound (0.17 ug/g) comprises 71% of total arsenic. Canada, Ontario Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Perch, yellow

PERCA FLAVESCENS

Tissue	Cases Exposure Route	Range	Mean	General Information
6114 Muscle		a) Not given b) Not given	a) 0.055 ug/g b) 0.007 ug/g Wet wt	a) Ontario b) Alberta Recovery from freshwater fish. Unknown organic compound (0.040 and 0.006 ug/g) comprises 73% and 85%, a) and b) respectively, of total arsenic. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Pickerel

Tissue	Cases Exposure Route	Range	Mean	General Information
6115 Muscle		Not given	0.037 ug/g Wet wt	Recovery from freshwater fish. Unknown organic compound (0.031 ug/g) comprises 84% of total arsenic. Canada, Alberta Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Pike

Tissue	Cases Exposure Route	Range	Mean	General Information
6116 Muscle		Not given	0.048 ug/g Wet wt	Recovery from freshwater fish. Unknown organic compound (0.034 ug/g) comprises 71% of total arsenic. Canada, Ontario Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Pike-perch
STIZOSTEDION LUCIOPERCA

Tissue	Cases Exposure Route	Range	Mean	General Information
6117 Body	a) 16 b) 3	a) 0.02-0.08 mg/kg b) 0.05-0.32 mg/kg Wet wt	a) 0.04 mg/kg b) 0.14 mg/kg Wet wt	a) Collected 1978-84, Lake IJssel b) Collected 1982-84, Hollands Diep Edible parts, mixed samples weighing about 20 kg. Collected from Lake IJssel, 1980-84. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6118 Body		a) Not given b) 0.03-0.03 ug/g c) Not given d) 0.02-0.02 ug/g e) Not given f) 0.01-0.02 ug/g g) Not given h) 0.01-0.01 ug/g Wet wt	a) 0.42+/-0.14 ug/g b) Not given c) 0.28+/-0.04 ug/g d) Not given e) 0.24+/-0.05 ug/g f) Not given g) 0.06+/-0.01 ug/g h) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish unpolluted, total d) Brackish unpolluted, inorganic form e) Fresh polluted, total f) Fresh polluted, inorganic form g) Fresh unpolluted, total h) Fresh unpolluted, inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6119 Body	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5 g) 5 h) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.42+/-0.14 ug/g b) 0.03 ug/g c) 0.28+/-0.04 ug/g d) 0.02 ug/g e) 0.24+/-0.05 ug/g f) 0.02 ug/g g) 0.06+/-0.01 ug/g h) 0.01 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water, total As d) Inorganic As e) Fresh polluted water, total As f) Inorganic As g) Fresh unpolluted water, total As h) Inorganic As In 6 species examined, fish from polluted water had 1.4-5 times higher levels, 5-12% of which was the inorganic form. Sweden AAS

BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION

Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334

Tissue	Cases Exposure Route	Range	Mean	General Information
6120 Liver		a) Not given b) 0.06-0.06 ug/g c) Not given d) 0.03-0.03 ug/g e) Not given f) 0.01-0.01 ug/g g) Not given h) <0.01-<0.01 ug/g Wet wt	a) 0.43+/-0.08 ug/g b) Not given c) 0.24+/-0.03 ug/g d) Not given e) 0.16+/-0.03 ug/g f) Not given g) 0.06+/-0.01 ug/g h) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish unpolluted, total d) Brackish unpolluted, inorganic form e) Fresh polluted, total f) Fresh polluted, inorganic form g) Fresh unpolluted, total h) Fresh unpolluted, inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS

BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE

Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334

Tissue	Cases Exposure Route	Range	Mean	General Information
			a) 0.134+/-0.[illegible] ug/g b) 0.08[illegible] ug/g [illegible] ug/g d) 0.13 ug/g e) [illegible] ug/g f) 0.[illegible] ug/g g) [illegible] ug/g h) <0.01 ug/g Wet wt.	a) [illegible] total As b) [illegible] c) Brackish [illegible] water total As d) Inorganic As e) Fresh polluted water total As f) Inorganic As g) Fresh unpolluted water total As h) Inorganic As <1-14% As inorganic form. Sweden AAS

BIOACCUMULATION; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION

[illegible], Valkovic, V.; Christakoopoulos, A.; Sandstrom, M. 1985. Chemosphere 14(3/4):327-334

Tissue	Cases Exposure Route	Range	Mean	General Information
6122 Muscle		Not given	0.023 ug/g Wet wt	Recovery from freshwater fish. Unknown organic compound [illegible] comprises 84% of total arsenic. Canada, Alberta Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986. Journal of Agricultural and Food Chemistry 34:315-319

Pintail
ANAS ACUTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6123 Bone	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 9.7 mg/kg b) 12.8+/-1.0 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES

(next page)

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Pintail
ANAS ACUTA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6124 Feathers	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 11.0+/-1.4 mg/kg b) 12.3+/-1.2 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM, COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Plaice
PLEURONECTES PLATESSA

Tissue	Cases Exposure Route	Range	Mean	General Information
6125 Body	14	3.8-16 mg/kg Wet wt	10.9 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-81. Netherlands AAS
FISHES, AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD, CADMIUM; MERCURY, SELENIUM, ARSENIC, NICKEL; CHROMIUM, ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.G.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Polychaete
NEREIS DIVERSICOLOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6126 Muscle	[illegible]	[illegible]	a) 9.5 ug/g b) 2.5 ug/g Dry wt	[illegible]

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Redshank, Icelandic

TRINGA TOTANUS ROBUSTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6127 Feathers	a) 9 b) 10 c) 10 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.78 mg/kg b) 1.46+/-0.37 mg/kg c) 0.60+/-0.28 mg/kg d) 1.63+/-1.07 mg/kg	a) Juveniles, 1979-1982 b) Adults, 1979, Schiermonnikoog c) Adults, 1980, Schiermonnikoog d) Adults, 1979-1980, Vlieland Age, year and location of collection. Juvenile primaries and adult No. 8 primaries analyzed. Dutch Wadden Sea NA
6128 Kidney	3	3.8-7.5 mg/kg Dry wt	Not given	Estimated from graph. Dutch Wadden Sea NA
6129 Liver	3	7-13.5 mg/kg Dry wt	Not given	Estimated from graph. Dutch Wadden Sea NA

FEATHERS; LIVER; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; METALS; MERCURY; ARSENIC; SELENIUM; ZINC; BIOACCUMULATION; WATER POLLUTION

Goede, A.A. 1985 Environmental Pollution (Series A) 37:287-309

Roach

RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6130 Body		a) Not given b) 0.01-0.01 ug/g c) 7.5-9.2% d) Not given e) 0.01-0.03 ug/g f) 14.4-30.0% Wet wt	a) 0.12+/-0.02 ug/g b) Not given c) Not given d) 0.09+/-0.03 ug/g e) Not given f) Not given Wet wt	a) Fresh polluted, total b) Fresh polluted, inorganic form c) Fresh polluted, % total as inorganic form d) Fresh unpolluted, total e) Fresh unpolluted, inorganic form f) Fresh unpolluted, % total as inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic.

BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE

Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6131 Body	a) 5 b) 5 c) 5 d) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.12+/-0.02 ug/g b) 0.01 ug/g c) 0.09+/-0.03 ug/g d) 0.03 ug/g Wet wt	a) Fresh polluted water, total As b) Inorganic As c) Fresh unpolluted water, total As d) Inorganic As In 6 species examined, fish from polluted water had 1.4-5 times higher levels, 5-12% of which was the inorganic form. Sweden AAS
BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION				
Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Salmon
SALMO sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6132 Muscle		Not given	0.31 ug/g Wet wt	Recovery (total arsenic) from seafood samples from Pacific Ocean, Canadian coastal waters. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS				
Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Scallop

Tissue	Cases Exposure Route	Range	Mean	General Information
6133 Muscle				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS				
Topping, G. 1986 Science of the Total Environment 49:9-25				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Scallop

Tissue	Cases Exposure Route	Range	Mean	General Information
6134 Muscle		Not given	0.68 ug/g Wet wt	Recovery (total arsenic) from seafood samples from Atlantic Ocean, Canadian coastal waters. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Scaup, lesser
AYTHYA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6135 Bone	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 4.1+/-1.0 mg/kg b) 17.0+/-10.3 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
6136 Feathers	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 71.7+/-37.9 mg/kg b) 55.9+/-24.1 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Sculpin, fourhorn
MYOXOCEPHALUS QUADRICORNIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6137 Body		a) Not given b) 0.10-0.13 ug/g c) 3.7-5.0% d) Not given e) 0.05-0.05 ug/g f) 9.4-9.4% Wet wt	a) 2.6+/-0.94 ug/g b) Not given c) Not given d) 0.54+/-0.16 ug/g e) Not given f) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish polluted, % total as inorganic form d) Brackish unpolluted, total e) Brackish unpolluted, inorganic form f) Brackish unpolluted, % total as inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Tissue	Cases Exposure Route	Range	Mean	General Information
6138 Body	a) 5 b) 5 c) 5 d) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 2.6+/-0.94 ug/g b) 0.10 ug/g c) 0.54+/-0.16 ug/g d) 0.05 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water, total As d) Inorganic As In 6 species examined, fish from polluted water had 1.4-5 times higher levels, 5-12% of which was the inorganic form. Sweden AAS
BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Tissue	Cases Exposure Route	Range	Mean	General Information
6139 Liver		a) Not given b) 0.05-0.06 ug/g c) 5.0-6.2% d) Not given e) 0.04-0.05 ug/g f) 6.6-8.1% Wet wt	a) 0.92+/-0.38 ug/g b) Not given c) Not given d) 0.64+/-0.11 ug/g e) Not given f) Not given Wet wt	a) Brackish polluted, total b) Brackish polluted, inorganic form c) Brackish polluted, % total as inorganic form d) Brackish unpolluted, total e) Brackish unpolluted, inorganic form f) Brackish unpolluted, % total as inorganic form Water source and form of element analyzed. Inorganic form assumed more toxic. Sweden AAS
BODY; LIVER; FISHES; AQUATIC; SWEDEN; ARSENIC; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Sculpin, fourhorn
MYOXOCEPHALUS QUADRICORNIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6140 Liver	a) 5 b) 5 c) 5 d) 5 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.92+/-0.38 ug/g b) 0.05 ug/g c) 0.64+/-0.11 ug/g d) 0.04 ug/g Wet wt	a) Brackish polluted water, total As b) Inorganic As c) Brackish unpolluted water, total As d) Inorganic As 5-8% As inorganic form. Sweden AAS
BODY; LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; SWEDEN; METAL POISONING; ARSENIC; ARSENIC ORGANIC COMPOUNDS; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; WATER POLLUTION Norin, H.; Vahter, M.; Christakopoulos, A.; Sandstrom, M. 1985 Chemosphere 14(3/4):325-334				

Shad, American
ALOSA SAPIDISSIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
6141 Gonads	5	Not detected-0.53 ug/g	Not given	Collected May, 1979, waters of Hartford County. Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries Colorimetry
6142 Muscle	5	Not detected-0.49 ug/g	Not given	Collected May, 1979, waters of Hartford County. Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries Colorimetry
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102				

Arsenic

7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Shad, gizzard
DOROSOMA CEPEDIANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
6143 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.29 ug/g b) 0.21 ug/g c) 0.15 ug/g d) 0.21 ug/g e) 0.15 ug/g f) 0.27 ug/g g) 0.15 ug/g h) 0.51 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Little Pigeon Bayou d) Grand Lake e) Henderson Lake f) Bayou Petite Prairie g) Spring Bayou h) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin AAS
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6144 Blood, whole	a) 12 b) 12 c) 12 d) 12 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.29 ug/g b) 0.03 ug/g c) 0.27 ug/g d) 0.11 ug/g	a) Withdrawal day 0 after 28 d dosing with mean of 147.3 ug As as arsanilic acid b) Withdrawal day 6 c) Withdrawal day 0 after 28 d closing with mean of 151.3 ug As as 3-nitro-4-hydroxyphenylarsonic acid d) Withdrawal day 6 Controls (fed no As) had 0.01, 0.01, 0.07, 0.08 ug/g, respectively. 46.5 kg wethers fed pelleted orchard grass with added As. AAS
6145 Kidney	a) 12 b) 12 c) 12 d) 12 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 13.0 ug/g b) 1.7 ug/g c) 5.9 ug/g d) 1.4 ug/g Dry wt	a) Withdrawal day 0 after 28 d dosing with mean of 147.3 ug As as arsanilic acid b) Withdrawal day 6 c) Withdrawal day 0 after 28 d closing with mean of 151.3 ug As as 3-nitro-4-hydroxyphenylarsonic acid d) Withdrawal day 6 Controls (fed no As) had 0.2, 0.3, 0.9, 1.0 ug/g, respectively. 46.5 kg wethers fed pelleted orchard grass with added As. AAS

(next page)

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Sheep
OVIS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6146 Liver	a) 12 b) 12 c) 12 d) 12 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 23.5 ug/g b) 3.5 ug/g c) 5.2 ug/g d) 1.0 ug/g Dry wt	a) Withdrawal day 0 after 28 d dosing with mean of 147.3 ug As as arsanilic acid b) Withdrawal day 6 c) Withdrawal day 0 after 28 d closing with mean of 151.3 ug As as 3-nitro-4-hydroxyphenylarsonic acid d) Withdrawal day 6 Controls (fed no As) had 0.5, 0.6, 0.7, 0.4 ug/g, respectively. 46.5 kg wethers fed pelleted orchard grass with added As. Colorimetry; AAS
6147 Muscle	a) 12 b) 12 c) 12 d) 12 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.8 ug/g b) 0.3 ug/g c) 0.4 ug/g d) 0.2 ug/g Dry wt	a) Withdrawal day 0 after 28 d dosing with mean of 147.3 ug As as arsanilic acid b) Withdrawal day 6 c) Withdrawal day 0 after 28 d closing with mean of 151.3 ug As as 3-nitro-4-hydroxyphenylarsonic acid d) Withdrawal day 6 Controls (fed no As) had 0.1, 0.01, 0.4, 0.2 ug/g, respectively. 46.5 kg wethers fed pelleted orchard grass with added As. AAS
DELIBERATE EXPOSURE; TERRESTRIAL; ARSENIC; SHEEP; CATTLE; LIVER; KIDNEYS; MUSCLES; BLOOD; MILK; BIOACCUMULATION; FOOD CONTAMINATION Calver, C.C.; Smith, L.W. 1981 Journal of Animal Science 51(2):414-421				

Shoveler
ANAS CLYPEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6148 Bone	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 12.0+/-0.9 mg/kg b) 11.2+/-1.1 mg/kg Wet wt S.E.	a) Without ingested shot b) With of ingested shot in gizzard No significant difference. Texas, Chambers County ES
6149 Feathers	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 2.6+/-0.5 mg/kg b) 13.9+/-9.7 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.05$). Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Shrimp

CRANGON CRANGON

Tissue	Cases Exposure Route	Range	Mean	General Information
6150 Body	17	2.0-6.8 mg/kg Wet wt	3.8 mg/kg Wet wt	Analyzed cooked and unpeeled. Mixed samples weighed about 20 kg. Collected from Western Wadden Sea, 1978-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Tissue	Cases Exposure Route	Range	Mean	General Information
6151 Muscle		a) Not given b) Not given	a) 20.8 ug/g b) 7.2 ug/g Wet wt	a) Pacific Ocean b) Locally purchased in Ottawa Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Sole

SOLEA SOLEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6152 Body	18	2.7-16 mg/kg Wet wt	7.1 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Arsenic

7440-38-2

As

AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Sole

SOLEA SOLEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6153 Muscle		a) Not given b) Not given c) Not given	a) 13.2 ug/g b) 5.2 ug/g c) 0.10 ug/g Wet wt	a) Pacific Ocean b) Pacific Ocean c) Locally purchased in Ottawa Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Spider strom

LAMBIS LAMBIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6154 Body		Not given	15 ppm Dry wt	From Lizard Island (14 deg 42' S), Great Barrier Reef. Australia AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION

Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483

Sunfish

LEPOMIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6155 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.07 ug/g b) 0.12 ug/g c) 0.02 ug/g d) 0.02 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Grand Lake c) Bayou Petite Prairie d) Spring Bayou Collected 6/81. Louisiana, Atchafalaya River Basin AAS

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS

Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Sunfish, redbreast
LEPOMIS AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6156 Muscle	2	0.005-1.012 mg/kg Wet wt	0.509 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6157 Muscle	2	0.010-0.012 mg/kg Wet wt	0.011 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Teal, green-winged
ANAS CRECCA

Tissue	Cases Exposure Route	Range	Mean	General Information
6158 Bone	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 13.9+/-1.5 mg/kg b) 16.6+/-0.5 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
6159 Feathers	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 8.7+/-0.6 mg/kg b) 4.9+/-1.4 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.01$). Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS
Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 28 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Tunicate

Tissue	Cases Exposure Route	Range	Mean	General Information
6160 Body		4-18 ppm Dry wt	Not given	Temperate-water species, Batemans Bay, New South Wales (35 deg 45' S): PYUVA PRAEPUTIALIS, POLYCITOR GELATINOSA, PHALLUSIA DIPROESSIUSCULA. Australia AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; ARSENIC; BODY; KIDNEYS; GONADS; DIGESTIVE TRACT; MUSCLES; GILLS; ZOOANTHELLAE; MOLLUSKS; TUNICATES; WATER POLLUTION; FOOD CONTAMINATION Benson, A.A.; Summons. R.E. 1981 Science 211(4481):482-483				

Whitefish

Tissue	Cases Exposure Route	Range	Mean	General Information
6161 Muscle		Not given	0.024 ug/g Wet wt	Recovery from freshwater fish. Unknown organic compound (0.019 ug/g) comprises 79% of total arsenic. Canada, Alberta Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Arsine oxide, hydroxydimethyl- (8 CI); Arsinic acid, dimethyl- (9 CI)
75-60-5
C2-H7-As-O2
MW 137.99, MP 200 C

Bird

Tissue	Cases Exposure Route	Range	Mean	General Information
6162 Liver	a) 6 b) 6	a) 0.48-2.2 ppm b) 0.35-10 ppm Dry wt	a) 1.04 ppm b) 1.05 ppm Dry wt Geometric	a) Detected in 6/6 samples collected 1983 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 6/6 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management. California, San Joaquin Valley AAS
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Arsonium, (carboxymethyl)trimethyl-, hydroxide, inner salt
64436-13-1
C5-H11-As-O2
Cod

Tissue	Cases Exposure Route	Range	Mean	General Information
6163 Muscle		a) Not given b) Not given	a) 4.1 ug/g b) 6.2 ug/g Wet wt	a) Atlantic Ocean, 80% of total arsenic b) Pacific Ocean, 84% of total arsenic Recovery from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS
Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Haddock
MELANOGRAMMUS AEGLEFINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6164 Muscle		a) Not given b) Not given	a) 4.7 ug/g b) 3.0 ug/g Wet wt	a) Atlantic Ocean, 78% of total arsenic b) Locally purchased in Ottawa, 86% of total arsenic Recovery from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS
Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Halibut

Tissue	Cases Exposure Route	Range	Mean	General Information
6165 Muscle		a) Not given b) Not given	a) 2.1 ug/g b) 1.7 ug/g Wet wt	a) Atlantic Ocean b) Pacific Ocean, 74% of total arsenic Recovery from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS
Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Arsonium, (carboxymethyl)trimethyl-, hydroxide, inner salt
64436-13-1
C5-H11-As-O2
Herring
CLUPEA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6166 Muscle		a) Not given b) Not given	a) 0.98 ug/g b) 0.86 ug/g Wet wt	a) Atlantic Ocean, 89% of total arsenic b) Pacific Ocean, 86% of total arsenic Recovery from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Lobster
HOMARUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6167 Muscle		a) Not given b) Not given	a) 4.5 ug/g b) 3.6 ug/g Wet wt	a) Atlantic Ocean, 87% of total arsenic b) Locally purchased in Ottawa, 76% of total arsenic Recovery from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Mackerel
PNEUMATOPHORUS JAPONICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6168 Muscle		Not given	0.44 ug/g Wet wt	Recovery from seafood samples from Atlantic Ocean, Canadian coastal waters. 80% of total arsenic. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Arsonium, (carboxymethyl)trimethyl-, hydroxide, inner salt
64436-13-1
C5-H11-As-O2
Salmon
SALMO sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6169 Muscle		Not given	0.15 ug/g Wet wt	Recovery from seafood samples from Atlantic Ocean, Canadian coastal waters. With 0.13 ug/g unknown organic arsenic compound, comprises 90% of total arsenic. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Scallop

Tissue	Cases Exposure Route	Range	Mean	General Information
6170 Muscle		Not given	0.60 ug/g Wet wt	Recovery from seafood samples from Atlantic Ocean, Canadian coastal waters. 88% of total arsenic. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Shrimp

Tissue	Cases Exposure Route	Range	Mean	General Information
6171 Muscle		a) Not given b) Not given	a) 15.8 ug/g b) 0.58 ug/g Wet wt	a) Pacific Ocean, with 3.2 ug/g arsenocholine comprises 91% of total arsenic b) Locally purchased in Ottawa, with 5.2 ug/g arsenocholine comprises 80% of total arsenic Recovery from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC
MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319				

Arsonium, (carboxymethyl)trimethyl-, hydroxide, inner salt

64436-13-1
C5-H11-As-O2

Sole

Tissue	Cases Exposure Route	Range	Mean	General Information
6172 Muscle		a) Not given b) Not given c) Not given	a) 11.3 ug/g b) 4.6 ug/g c) 0.08 ug/g Wet wt	a) Atlantic Ocean, 86% of total arsenic b) Pacific Ocean, 88% of total arsenic c) Locally purchased in Ottawa, 80% of total arsenic Recovery from seafood samples from Canadian coastal waters. Canada Fast atom bombardment MS; HPLC

MEASUREMENT METHODS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; ARSENIC; CANADA; ARSENIC ORGANIC COMPOUNDS; FOOD CONTAMINATION; CRUSTACEANS

Lawrence, J.F.; Michalik, P.; Tam, G.; Conacher, H.B.S. 1986 Journal of Agricultural and Food Chemistry 34:315-319

Barium

7440-39-3
Ba
AtW 137.34, MP 710 C (approx), BP 1600 C (approx), VP 10 mm Hg at 1049 C

Bear
URSUS SPELEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6173 Bone	4	76-205 ug/g	Not given	Pleistocene (20-50,000 yr BP) specimens. Humerus, femur and ulna, collected from caves, late 19th century. Significance of sampling techniques, fossilization changes, burial site conditions and other geochemical and geographic factors is discussed. France ICP-AES

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Cattle
BOS TAURUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6174 Bone	9	40-85 ug/g	Not given	Femurs, tibiae and ulnae. Detection limit 1.0 ug/g. Absence probably due to use of calcium and phosphorus supplements in feed. France, Sarthe AAS; MS

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Barium

7440-39-3
Ba
AtW 137.34, MP 710 C (approx), BP 1600 C (approx), VP 10 mm Hg at 1049 C

Cattle (ancient)

Tissue	Cases Exposure Route	Range	Mean	General Information
6175 Bone	2	140-480 ug/g	310 ug/g	Pleistocene (20-50,000 yr BP) metacarpals, Bovidae family. Collected from caves. Significance of sampling techniques, fossilization changes, burial site conditions and other geochemical and geographic factors is discussed. Calculated mean. France; Poland ICP-AES

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Dog
CANIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6176 Bone	2	100-150 ug/g	125 ug/g	Pleistocene (20-50,000 yr BP) specimens. Tibia and fibula, collected from cave, late 19th century. Significance of sampling techniques, fossilization changes, burial site conditions and other geochemical and geographic factors is discussed. Calculated mean. France ICP-AES

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6177 Bone	3	48-225 ug/g	Not given	Pleistocene (20-50,000 yr BP) specimens. Femur and two humeri, collected from caves, late 19th century. Significance of sampling techniques, fossilization changes, burial site conditions and other geochemical and geographic factors is discussed. France ICP-AES

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Barium

7440-39-3
Ba
AtW 137.34, MP 710 C (approx), BP 1600 C (approx), VP 10 mm Hg at 1049 C

Lion
PANTHERA LEO

Tissue	Cases Exposure Route	Range	Mean	General Information
6178 Bone	1	Not applicable	120 ug/g	Pleistocene (20,000-50,000 yr BP) metacarpal. Collected from cave, late 19th century. Significance of sampling techniques, fossilization changes, burial site conditional and other geochemical and geographic factors is discussed. France ICP-AES
BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126				

Bens(a)anthracene

56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C

Burbot
LOTA LOTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6179 Gall bladder		Not detected	Not detected	Collected 4/28/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with two other, also undetected, PAH's. Finland, Archipelago Sea GLC/MS
6180 Liver		Not given	180 ug/kg Wet wt	Collected 4/28/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with chrysene and triphenylene. Finland, Archipelago Sea GLC/MS
6181 Muscle		Not given	3 ug/kg Wet wt	Collected 4/28/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with chrysene and triphenylene. Finland, Archipelago Sea GLC/MS
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343				

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C

Clam, short-necked
VENERUPIS JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6182 Body		1.02-1.81 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS				
Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Corb-shell

Tissue	Cases Exposure Route	Range	Mean	General Information
6183 Body		Not given	1.11 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS				
Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Herring, Baltic
CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6184 Muscle		Not detected	Not detected	Collected from 2 sites, 11/7, 10/20, 12/1/78. Detection limit 0.5 ug/kg. Composite samples. Measured in a mixture with two other, also undetected, PAH's. Finland, Archipelago Sea GLC/MS
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION				
Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343				

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C

Mussel

Tissue	Cases Exposure Route	Range	Mean	General Information
6185 Body		<0.95-2.28 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC

ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS
Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949

Tissue	Cases Exposure Route	Range	Mean	General Information
6186 Body	a) 29 b) 28	a) Not given b) Not given	a) 4 ppb b) 2 ppb Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC

ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN
Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6187 Body		a) Not detected b) Not detected-15 ug/kg Wet wt	a) Not given b) Not given	a) Collections from 4 sites, 10/9 and 10/12/78 b) From 3 sites, 5/9, 5/23, 6/5/79 Detection limit 0.5 ug/kg. Composite samples of at least 10 individuals analyzed. Mixture with chrysene and tryphenylene. Finland, Archipelago Sea GLC/MS

ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION
Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C

Oyster

Tissue	Cases Exposure Route	Range	Mean	General Information
6188 Body		Not given	1.13 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6189 Body		Not given	9.9 ppb Wet wt	Mean of 8 samples collected 5/80-6/80, Inner Harbor Navigation Canal at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Tissue	Cases Exposure Route	Range	Mean	General Information
6190 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) 2.1-3.6 ug/g Dry wt	a) 0 ug/g b) 0 ug/g c) 0 ug/g d) 0.6 ug/g e) 0.5 ug/g f) Not given Dry wt	a) Wreck Shoals, James River b) Deepwater Shoals, James River c) White Shoals, James River d) Hospital Point, Elizabeth River e) Piankatank River oysters relocated for 6 d at Hospital Point, Elizabeth River f) Piankatank River oysters relocated for 6 d at S217, Elizabeth River Collection sites. Levels generally correspond with degree of industrial and urban development and shipping traffic in habitats. Minimum detection limit of PAH's 0.1-0.2 ug/g dry wt. Virginia GC
BODY; OYSTERS; AQUATIC; ENVIRONMENTAL EXPOSURE; VIRGINIA; POLYCYCLIC AROMATIC HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION; INDUSTRIAL PLANTS; INDUSTRIAL POLLUTION; INDUSTRIES Pittinger, C.A.; Buikema, A.L.; Hornor, S.G.; Young, R.W. 1985 Environmental Toxicology and Chemistry 4:379-387				

Benz(a)anthracene
56-55-3
C18-H12
MW 228.2, MP 160 C, BP 400 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6191 Body		a) Not detected-8.7+/-6.5 ug/kg b) Not detected-12.0+/-2.9 ug/kg c) Not detected-3.4+/-5.8 ug/kg d) 0.9+/-8-5.0+/-2.7 ug/kg e) Not detected f) Not detected-1.2+/-1.2 ug/kg	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Palmetto Bay Marina, 10 sites, spring b) Summer c) Outdoor Resorts Marina, 8 sites, spring d) Summer e) Fripp Island Marina, 9 sites, spring f) Summer Pooled, 15 adults/sample, collected weekly from mid-intertidal areas of reefs in different sites at each marina. 3/29-4/14/83 and 7/26-8/11/83. For each group, n=3. Ranges of means. Detection limit 0.80 ug/kg. South Carolina, Beaufort County HPLC
AQUATIC; ENVIRONMENTAL EXPOSURE; MOLLUSKS; SOUTH CAROLINA; WATER POLLUTION; FOOD CONTAMINATION; BENZOPYRENE; POLYCYCLIC AROMATIC HYDROCARBONS Marcus, J.M.; Stokes, T.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:835-844				

Pike-perch
STIZOSTEDION LUCIOPERCA

Tissue	Cases Exposure Route	Range	Mean	General Information
6192 Gall bladder		Not detected	Not detected	Collected 7/3/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with two other, also undetected, PAH's. Finland, Archipelago Sea GLC/MS
6193 Liver		Not detected	Not detected	Collected 7/3/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with two other, also undetected, PAH's. Finland, Archipelago Sea GLC/MS
6194 Muscle		Not detected-15 ug/kg Wet wt	Not given	Collected from 2 sites, 12/1/78, 7/3/79. Detection limit 0.5 ug/kg. Composite samples. Measured in a mixture with chrysene and triphenylene. Finland, Archipelago Sea GLC/MS
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343				

Benz(e)acephenanthrylene

205-99-2
C20-H12
MW 252.32, MP 168 C

Clam, short-necked
VENERUPIS JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6195 Body		0.82-1.87 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Corb-shell

Tissue	Cases Exposure Route	Range	Mean	General Information
6196 Body		Not given	1.37 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Mussel

Tissue	Cases Exposure Route	Range	Mean	General Information
6197 Body		0.83-1.94 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Benz(e)acephenanthrylene
205-99-2
C20-H12
MW 252.32, MP 168 C

Oyster

Tissue	Cases Exposure Route	Range	Mean	General Information
6198 Body		Not given	2.17 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6199 Body		a) Not detectable-2.6+/-2.5 ug/kg b) Not detectable-5.2+/-2.2 ug/kg c) Not detectable d) Not detectable-3.2+/-2.4 ug/kg	a) Not given b) Not given c) Not given d) Not given	a) Palmetto Bay Marina, 10 sites, spring b) Summer c) Outdoor Resorts Marina, 8 sites, spring d) Summer Pooled, 15 adults/sample, collected weekly from mid-intertidal areas of reefs in different sites at each marina. 3/29-4/14/83 and 7/26-8/11/83. For each group, n=3. Ranges of means. Detection limit 1.5 ug/kg. South Carolina, Beaufort County HPLC
AQUATIC; ENVIRONMENTAL EXPOSURE; MOLLUSKS; SOUTH CAROLINA; WATER POLLUTION; FOOD CONTAMINATION; BENZOPYRENE; POLYCYCLIC AROMATIC HYDROCARBONS Marcus, J.M.; Stokes, T.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:835-844				

Benzamide, 2-hydroxy-5-(1-hydroxy-2-((1-methyl-3-phenylpropyl)amino)ethyl)-
36894-69-6
C19-H24-N2-O3
MW 328.45

Swallow, tree
TACHYCINETA BICOLOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6200 Carcass	23	Not detected-0.07 ppm Wet wt	<0.01 ppm Wet wt	Detected in 1/23 individuals. Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.05 ppm wet wt. Colorado; Oregon; Montana GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Benzene
71-43-2
C6-H6
MW 78.11, MP 5.51 C, BP 80.093-80.094 C, VP 10 mm Hg at 26.1 C

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6201 Body		Not given	260 ppb Wet wt	Chef Menteur Pass, navigable channel into Lake Pontchartrain, specimens collected May-June, 1980. Composite samples. Louisiana GC/MS

BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION
Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6202 Body		Not given	220 ppb Wet wt	Collected in May-June, 1980, from mouth of Inner Harbor Navigational Canal leading to Lake Pontchartrain. 5 samples. Louisiana GC/MS

BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION
Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255

Benzene, chloro-
108-90-7
C6-H5-Cl
MW 112.56, MP -45 C, BP 131.7 C, VP 10 mm Hg at 22.2 C

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6203 Body		Not given	0.6 ppb Wet wt	Chef Menteur Pass, navigable channel into Lake Pontchartrain, specimens collected May-June, 1980. Composite samples. Louisiana GC/MS

BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION
Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255

Benzene, chloro-
108-90-7
C6-H5-Cl
MW 112.56, MP -45 C, BP 131.7 C, VP 10 mm Hg at 22.2 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6204 Body		Not given	0.04 ppb Wet wt	Collected in May-June, 1980, from mouth of Inner Harbor Navigational Canal leading to Lake Pontchartrain. 5 samples. Louisiana GC/MS
BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255				

Benzene, dichloro-
25321-22-6
C6-H4-Cl2
MW 147.01, BP 173-180 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6205 Body		Not given	58 ppb Wet wt	Mean of 8 samples collected 5/80-6/80, Inner Harbor Navigation Canal at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Benzene, ethyl-
100-41-4
C8-H10
MW 106.16, MP -94.97 C, BP 136.25 C, VP 10 mm Hg at 25.9 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6206 Body		Not given	0.8 ppb Wet wt	Collected in May-June, 1980, from mouth of Inner Harbor Navigational Canal leading to Lake Pontchartrain. 5 samples. Louisiana GC/MS
BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255				

Benzene, hexabromo-
87-82-1
C6-Br6
MW 551.52, MP 327 C

Rat

Tissue	Cases Exposure Route	Range	Mean	General Information
6207 Adipose	6 Ingestion	9-5000 ng/g	Not given	40 d and 24 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6208 Blood	6 Ingestion	0.6-800 ng/g	Not given	40 d and 4 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6209 Body	6 Ingestion	0.1-300 ug	Not given	Body burden at 40 and 0 d after feeding of 0.2 mg in 1 ml of corn oil to 5 wk old Wistar rats. Elimination was biphasis. Japan GC-EC
6210 Brain	6 Ingestion	50-4000 ng/g	Not given	40 d and 6 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6211 Kidney	6 Ingestion	1-55 ng/g	Not given	20 d and 6 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6212 Liver	6 Ingestion	0.2-350 ng/g	Not given	40 d and 2 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6213 Urine	8 Ingestion	70-140 ng	Not given	Cumulative excretion, days 1 and 6 after feeding of 0.2 mg in 1 ml of corn oil to 5 wk old Wistar rats. Japan GC-EC

DELIBERATE EXPOSURE; RATS; JAPAN; TERRESTRIAL; ADIPOSE TISSUE; BODY; BLOOD; BRAIN; LIVER; KIDNEYS; URINE; INGESTION; CHLOROBENZENES; BROMOBENZENES; HEXACHLOROBENZENE; HEXABROMOBENZENE

Yamaguchi, Y.; Kawano, M.; Tatsukawa, R. 1986 Chemosphere 15(4):453-459

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Antelope

Tissue	Cases Exposure Route	Range	Mean	General Information
6214 Muscle		Not given	0.01 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES

Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738

Bass, rock
AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6215 Body		Not applicable	0.003 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6216 Body		Not applicable	3.47 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6217 Body		Not applicable	0.005 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, brown
ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6218 Body		Not applicable	0.71 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, yellow
ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6219 Body		Not applicable	0.31 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
6220 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 0.003 mg/kg b) 0.09 mg/kg c) 0.08 mg/kg d) 0.02 mg/kg e) 0.05 mg/kg f) 0.004 mg/kg g) 0.002 mg/kg h) 0.01 mg/kg i) 0.01 mg/kg	a) Black River, OH, 10/21/81 b) Sheboygan River, WI, 9/30/80 c) Another sample, same as b) d) Menominee River, WI, 8/15/81 e) Kinnickinnic River, WI, 7/15/81 f) Wolf River, WI, 9/15/80 g) Fox River, WI, above DePere, 10/10/80 h) Same, except 11/15/81 i) Fox River, below DePere, 10/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Tissue	Cases Exposure Route	Range	Mean	General Information
6221 Liver	1	Not applicable	13 mg/kg Lipid basis	Collected at Lake Seto Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Catfish
ANARHICHAS LUPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6222 Liver	2	1-3 ug/kg Wet wt	2+/-1 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Catfish
ANARHICHAS LUPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6223 Muscle	8	0.05-0.23 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Catfish, mud
CLARIAS LAZERA

Tissue	Cases Exposure Route	Range	Mean	General Information
6224 Muscle	11	0.06-0.62 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6225 Adipose		Not given	5 ppb	Background residue in tissue from 32 samples prepared by US Dept. of Agriculture, Food Safety and Inspection Service, Beltsville, MD and submitted as blind duplicates for analysis to 7 laboratories.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; CATTLE; ADIPOSE TISSUE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; DDE; HEXACHLOROBENZENE; FOOD CONTAMINATION Ault, J.A.; Spurgeon, T.E.; Gillard, D.S.; Mallinson, E.T. 1985 Journal of the Association of Official Analytical Chemists 68(5):941-944				

Tissue	Cases Exposure Route	Range	Mean	General Information
6226 Liver		Not given	0.06 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6227 Adipose	21	Not given	9+/-20 ug/kg	1972-74, 5 composite samples. Abdominal fat Canada, Ontario GC
6228 Eggs	a) 84 b) 96	a) Not given b) Not given	a) 108+/-120 ug/kg b) 0.6+/-2.0 ug/kg	a) 1972-74, 24 composite samples b) 1981-82, 31 composite samples Fat. Canada, Ontario GC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; ADIPOSE TISSUE; EGGS; CHICKENS; CANADA; FOOD CONTAMINATION; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; CHLORDANE; LINDANE; POLYCHLORINATED BIPHENYLS; BIRDS Frank, R.; Rasper, J.; Braun, H.E.; Ashton, G. 1985 *Journal of the Association of Official Analytical Chemists* 68(1):124-129				

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
6229 Brain	2 Ingestion	a) 274,138 dpm/mg b) 293,294 dpm/mg c) 123,45 dpm/mg	a) 256 dpm/mg b) 294 dpm/mg c) 84 dpm/mg	a) 5 days after administration b) 30 days c) 60 days Single dose of [14-C]-labelled compound, 5 uCi/100 g body wt. Specific activity 35.32 Ci/mol. Ranges are given as observed values from the 2 samples. Scintillation counting
DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; FISHES; LIVER; MUSCLES; BRAIN; PESTICIDES; AQUATIC; WATER POLLUTION; HEXACHLOROBENZENE Ingebrigtsen, K.; Solbakken, J.E. 1985 Journal of Toxicology and Environmental Health 16:197-205				

Tissue	Cases Exposure Route	Range	Mean	General Information
6230 Liver	18	6-26 ug/kg Wet wt	18+/-8 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
6231 Liver	2 Ingestion	a) 523,266 dpm/mg b) 573,692 dpm/mg c) 1036,380 dpm/mg	a) 395 dpm/mg b) 633 dpm/mg c) 708 dpm/mg	a) 5 days after administration b) 30 days c) 60 days Single dose of [14-C]-labelled compound, 5 uCi/100 g body wt. Specific activity 35.32 Ci/mol. Ranges are given as observed values from the 2 samples. Scintillation counting
6232 Muscle	2 Ingestion	a) 235,53 dpm/mg b) 41,50 dpm/mg c) 21,27 dpm/mg	a) 144 dpm/mg b) 46 dpm/mg c) 24 dpm/mg	a) 5 days after administration b) 30 days c) 60 days Single dose of [14-C]-labelled compound, 5 uCi/100 g body wt. Specific activity 35.32 Ci/mol. Ranges are given as observed values from the 2 samples. Scintillation counting

DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; FISHES; LIVER; MUSCLES; BRAIN; PESTICIDES; AQUATIC; WATER POLLUTION; HEXACHLOROBENZENE
Ingebrigtsen, K.; Solbakken, J.E. 1985 Journal of Toxicology and Environmental Health 16:197-205

Cormorant, olivaceous
PHALACROCORAX OLIVACEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6233 Carcass		a) 0.1-0.6 ppm b) Not detected Wet wt	a) 0.17 ppm b) Not detected Wet wt	a) 1980 b) 1981 Shot with steel shot at Atkinson Island. Carcasses analyzed did not include skin, bills, feet, gastrointestinal tracts, livers, or kidneys. Detection limit 0.1 ppm wet wt. Texas, Galveston Bay CC; GLC-EC
6234 Eggs	a) 13 b) 18	a) 0.2-0.6 ppm b) Not detected Wet wt	a) Not given b) Not detected	a) 1980. Detected in 6/13 b) 1981. Detection limit 0.1 ppm wet wt. Texas, Galveston Bay CC; GLC-EC

BIRDS; TEXAS; CHLORINE ORGANIC COMPOUNDS; ENVIRONMENTAL EXPOSURE; AQUATIC; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDD; DDE; DIELDRIN; STYRENES; PESTICIDE RESIDUES; WATER POLLUTION; EGGS; BODY
King, K.A.; Krynitsky, A.J. 1986 Archives of Environmental Contamination and Toxicology 15:367-376

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6235 Body		Not applicable	<0.002 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Crow, American
CORVUS BRACHYRHYNCHOS

Tissue	Cases Exposure Route	Range	Mean	General Information
6236 Brain	1	Not applicable	0.70 ug/g Wet wt	From group found dead or dying, Umatilla National Wildlife Refuge, 1979. Oregon; Washington GLC

ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN
Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81

Dolphin, striped
STENELLA COERULEOALBA

Tissue	Cases Exposure Route	Range	Mean	General Information
6237 Adipose	1	175-177 ng/g Lipid wt	176 ng/g Lipid wt	Mean of levels from 3 different areas, front, center and rear. 16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6238 Blood	1	Not applicable	766 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6239 Brain	1	a) Not applicable b) Not applicable c) Not applicable	a) 37 ng/g b) 40 ng/g c) 32 ng/g Lipid wt	a) Cerebrum b) Cerebellum c) Medulla oblongata 16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6240 Heart	1	Not applicable	217 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6241 Intestine	1	Not applicable	152 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6242 Kidney	1	Not applicable	155 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6243 Liver	1	Not applicable	179 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6244 Lung	1	Not applicable	146 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6245 Muscle	1	196-241 ng/g Lipid wt	221 ng/g Lipid wt	Mean of levels from 6 different areas, front, center and rear. 16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6246 Stomach	1	Not applicable	139 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; DOLPHINS; JAPAN; PACIFIC OCEAN; ADIPOSE TISSUE; MUSCLES; KIDNEYS; LIVER; INTESTINES; LUNGS; HEART; STOMACH; BLOOD; BRAIN; CEREBRUM; CEREBELLUM; MEDULLA; POLYCHLORINATED BIPHENYLS; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION

Tanabe, S.; Tatsukawa, R.; Tanaka, H.; Maruyama, K.; Miyazaki, N.; Fujiyama, T. 1981 Agricultural and Biological Chemistry 45(11):2569-2578

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Duck, mallard
ANAS PLATYRHYNCHOS

Tissue	Cases Exposure Route	Range	Mean	General Information
6247 Eggs	a) 3 b) 10	a) Not detected-0.26 ug/g b) Not detected-2.94 ug/g Wet wt	a) 0.15 ug/g b) Not given Geometric Wet wt	a) 1978, 2 positive b) 1979, 3 positive Collected from nests, Umatilla National Wildlife Refuge. Detection limit 0.1 ug/g. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Eagle, white-tailed
HALIAEETUS ALBICILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6248 Brain	1	Not applicable	448 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
6249 Eggs	4	8-70 ng/g Wet wt	47.5+/-27.2 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
6250 Kidney	1	Not applicable	430	Collected in 1980-1982. Finland GC-EC
6251 Liver	1	Not applicable	890 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
6252 Muscle	4	165-522 ng/g Wet wt	289+/-161 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Egret, cattle
BUBULCUS IBIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6253 Brain	a) 2 b) 1 c) 3	a) Not detected b) Not detected c) Not detected	a) Not detected b) Not detected c) Not detected	a) Maryland, adults, dieldrin poisoning, 6/78 b) Nebraska, adult, possible dieldrin poisoning, 5/78 c) New Mexico, dead chicks, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
6254 Carcass	a) 2 b) 1 c) 1 d) 3	a) Not detected b) Not detected c) Not detected d) Not detected	a) Not detected b) Not detected c) Not detected d) Not detected	a) Maryland, adults, dieldrin poisoning, 6/78 b) Alabama, adult shot 7/70 c) Nebraska, adult, possible dieldrin poisoning, 5/78 d) New Mexico, dead chicks, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135				

Egret, great
CASMERODIUS ALBUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6255 Brain	a) 4 b) 1	a) Not detected b) Not applicable	a) Not detected b) 0.20 ppm Wet wt	a) Minnesota, adults and chicks, 6/75-6/76 b) California, adult, 7/78 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
6256 Carcass	a) 2 b) 2 c) 1 d) 4 e) 1	a) Not detected b) Not detected c) Not detected d) Not detected e) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) 0.18 ppm Wet wt	a) Maryland, 6/69 b) Louisiana, fledged immatures, 7/71 c) Michigan, adult shot 5/70 d) Minnesota, adults and chicks, 6/75-6/76 e) California, adult, 7/78 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Egret, snowy
EGRETTA THULA

Tissue	Cases Exposure Route	Range	Mean	General Information
6257 Brain	1	Not detected	Not detected	Dead chick, 6/77. Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. New Mexico GLC
6258 Carcass	a) 6 b) 1 c) 1 d) 1	a) Not detected b) Not detected c) Not detected d) Not detected	a) Not detected b) Not detected c) Not detected d) Not detected	a) Maryland, chicks, 6/69 b) Alabama, fledged immature shot 7/70 c) Louisiana, fledged immature, 7/71 d) New Mexico, dead chick, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135				

Ferret
MUSTELA PUTORIUS FURO

Tissue	Cases Exposure Route	Range	Mean	General Information
6259 Adipose	11 Ingestion Transplacental	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 4472+/-780.5 dpm/g b) 4429+/-867.6 dpm/g c) 19,525+/-1503.9 dpm/g d) 19,704+/-1666.0 dpm/g e) 11,678+/-712.4 dpm/g S.E.	a) Subcutaneous fat, bred adults, d 14 of gestation b) Visceral fat c) Unbred, subcutaneous d) Visceral e) 5 wk old offspring of a), visceral fat Values measured 62 d post-dose (a-d). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 g diet. No clinical signs of toxicity. Scintillation counting
6260 Blood	a) 3 b) 5 Ingestion	a) Not given b) Not given	a) 49+/-34.6 dpm/g b) 166+/-26.8 dpm/g S.E.	a) Bred adults, d 14 of gestation b) Unbred Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Ferret
MUSTELA PUTORIUS FURO

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6261 Brain	a) 3 b) 5 Ingestion Transplacental	a) Not given b) Not given c) Not given	a) 61+/-30.0 dpm/g b) 395+/-48.5 dpm/g c) 130+/-29.4 dpm/d S.E.	a) Bred adults, d 14 of gestation b) Unbred c) 5 wk old offspring of a) Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting
6262 Heart	a) 3 b) 5 Ingestion	a) Not given b) Not given	a) 34+/-9.2 dpm/g b) 310+/-56.8 dpm/g S.E.	a) Bred adults, d 14 of gestation b) Unbred Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting
6263 Kidney	Ingestion Transplacental	a) Not given b) Not given c) Not given	a) 105+/-31.1 dpm/g b) 611+/-80.4 dpm/g c) 209+/-37.2 dpm/g S.E.	a) Bred adults, d 14 of gestation b) Unbred c) 5 wk old offspring of a) Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting
6264 Liver	Ingestion Transplacental	a) Not given b) Not given c) Not given	a) 248+/-68.9 dpm/g b) 1445+/-145.2 dpm/g c) 1420+/-185.6 dpm/g S.E.	a) Bred adults, d 14 of gestation b) Unbred c) 5 wk old offspring of a) Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting
6265 Lung	a) 3 b) 5 Ingestion	a) Not given b) Not given	a) 1+/-0.3 dpm/g b) 24+/-18.4 dpm/g S.E.	a) Bred adults, d 14 of gestation b) Unbred Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting
6266 Muscle	a) 3 b) 5 c) 3 Ingestion Transplacental	a) Not given b) Not given c) Not given	a) 53+/-14.4 dpm/g b) 384+/-64.0 dpm/g c) 561+/-204.8 dpm/g S.E.	a) Bred adults, d 14 of gestation b) Unbred c) 5 wk old offspring of a) Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Ferret
MUSTELA PUTORIUS FURO

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6267 Spleen	a) 3 b) 5 Ingestion	a) Not given b) Not given	a) 13+/-7.5 dpm/g b) 180+/-24.8 dpm/g S.E.	a) Bred adults, d 14 of gestation b) Unbred Values measured 62 d post-dose (a,b). Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting
6268 Urine	Ingestion	a) Not given b) Not given	a) 5.0% b) 5.8%	a) Bred adults, d 14 of gestation b) Unbred Cumulative excretion 8 wk after dose. Single dose was of [14-C]-labeled compound, 7.5 uCi (57.6 ug), specific activity 35.32 mCi/mmol in 7.5 diet. No clinical signs of toxicity. Scintillation counting
DELIBERATE EXPOSURE; FERRETS; TERRESTRIAL; BLOOD; ADIPOSE TISSUE; MUSCLES; HEART; KIDNEYS; SPLEEN; LIVER; LUNGS; BRAIN; URINE; PESTICIDES; PESTICIDE RESIDUES; ADULTS; NEWBORN; INGESTION; TRANSPLACENTAL TRANSFER Bleavins, M.R.; Breslin, W.J.; Aulerich, R.J.; Ringer, R.K. 1982 Journal of Toxicology and Environmental Health 10:929-940				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
6269 Body		0.00-0.12 ug/g Wet wt	Not given	Study of 315 composite samples (3-5 adults of species) from 107 stations in more than 45 states, 1980-81. Range from total of 62 species. Maximum value in lipid wt=1.2 ug/g. Part of National Pesticides Monitoring Program. United States GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; UNITED STATES; PESTICIDES; PESTICIDE RESIDUES; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; TOXAPHENE; COMPARATIVE EVALUATIONS; WATER POLLUTION; BIOLOGICAL MONITORING Schmitt, C.J.; Zajicek, J.L.; Ribick, M.A. 1985 Archives of Environmental Contamination and Toxicology 14:225-260				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
6270 Body, whole		<5-447 ppb	Not given	Composite sample from 22 watersheds near Great Lakes, 1978. Total of 26 samples collected, included 138 individuals: walleye, carp, white sucker, channel catfish, freshwater drum, quillback, stone roller, goldfish, brown trout, hog sucker, coho salmon. US EPA Region V: Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, New York GLC

ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; MINNESOTA; WISCONSIN; MICHIGAN; OHIO; INDIANA; PENNSYLVANIA; NEW YORK; DDT; DDE; POLYCHLORINATED BIPHENYLS; HEPTACHLOR; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; OXYCHLORDANE; CHLORDANE; NONACHLOR

Veith, G.D.; Kuehl, D.W.; Leonard, E.N.; Welch, K.; Pratt, G. 1981 Pesticides Monitoring Journal 15(1):1-8

Fish (A. spinifer)
ARGYROPS SPINIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6271 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 3.84 ug/kg b) 96.16 ug/kg c) 16.0 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES

El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Fish (S. auratus)
SPARUS AURATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6272 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 12.34 ug/kg b) 78.3 ug/kg c) 0.1 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES

El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Fish (S. aurita)
SARDINELLA AURITA

Tissue	Cases Exposure Route	Range	Mean	General Information
6273 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 0.1 ug/kg b) 0.1 ug/kg c) 8.54 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES
El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Fish (S. vulgaris)
SOLEA VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6274 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 0.1 ug/kg b) 63.52 ug/kg c) 18.42 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES
El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Fish (Saurida sp.)
SAURIDA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6275 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 2.49 ug/kg b) 74.3 ug/kg c) 0.1 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES
El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Fish (Tilapia)
TILAPIA ZILLII

Tissue	Cases Exposure Route	Range	Mean	General Information
6276 Muscle	6	0.04-0.14 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Fish (Trichurus sp.)
TRICHURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6277 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 0.1 ug/kg b) 23.85 ug/kg c) 4.46 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Fish, African bony tongue
HETEROTIS NILOTICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6278 Muscle	5	0.06-0.15 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Fish, black scabbard
APHANOPUS CARBO

Tissue	Cases Exposure Route	Range	Mean	General Information
6279 Liver	1	Not applicable	17 mg/kg Lipid basis	Collected south of Madeira. Deep water (800-1200 m) habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, elephant snout
MORMYRUS MACROPHTHALMUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6280 Muscle	4	0.01-0.33 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Fish, parrot
SPARISOMA (*EUSCARUS*) *CRETENSE*

Tissue	Cases Exposure Route	Range	Mean	General Information
6281 Liver	1	Not applicable	2 mg/kg Lipid basis	Collected from local fish market on Porta Santo, east of Madeira. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Fish, scorpion
SCORPAENA SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
6282 Liver	1	Not applicable	4 mg/kg Lipid basis	Collected off northern coast of Sao Miguel, Azores. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, snake head
CHANNA OBSCURA

Tissue	Cases Exposure Route	Range	Mean	General Information
6283 Muscle	5	0.06-0.09 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Flounder
PLATICHTHYS FLESUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6284 Liver	10	Not detected-3 ug/kg Wet wt	1+/-1 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Guillemot, common
URIA AALGE

Tissue	Cases Exposure Route	Range	Mean	General Information
6285 Eggs	a) 10 b) 9 c) 7 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 0.17+/-0.04 ug/g b) 0.13+/-0.04 ug/g c) 0.09+/-0.01 ug/g d) 0.13+/-0.04 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6286 Blood	6	a) 0.74-2.80 ppm b) 0.01-0.02 ppm	a) 1.90 ppm b) b) 0.01 ppm	a) Lipid basis b) Fresh wt From pre-fledglings collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Knife Island GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 *Archives of* Environmental Contamination and Toxicology 15:313-320				

Tissue	Cases Exposure Route	Range	Mean	General Information
6287 Eggs	a) 9 b) 11 c) 13 d) 10	a) Not given b) Not given c) Not given d) Not given	a) 0.13+/-0.05 ug/g b) 0.09+/-0.03 ug/g c) 0.08+/-0.03 ug/g d) 0.11+/-0.03 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6288 Eggs		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 23 ppb b) 123 ppb c) 120 ppb d) 221 ppb e) 141 ppb f) 321 ppb Wet wt	a) Kent Island, Bay of Fundy b) Agawa Rock, Lake Superior c) Chantry Island, Lake Huron d) Presqu'ile, Lake Ontario e) Channel-Shelter Island, Saginaw Bay f) Fighting Island, Detroit River Pooled homogenates from 15-25 eggs. Collected 1981. Great Lakes; Atlantic Ocean GC
ENVIRONMENTAL EXPOSURE; AQUATIC; EGGS; GREAT LAKES; WATER POLLUTION; PESTICIDES; BIRDS; HEXACHLOROBENZENE; HEPTACHLOR EPOXIDE; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; DIELDRIN; OXYCHLORDANE Ellenton, J.A.; Brownlee, L.J.; Hollebone, B.R. 1985 Environmental Toxicology and Chemistry 4:615-622				

Tissue	Cases Exposure Route	Range	Mean	General Information
6289 Eggs	10	0.03-0.07 ppm Fresh wt	0.05 ppm Fresh wt	Collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Knife Island GC
6290 Muscle		a) Not detected-0.32 ppm b) Not detected-0.02 ppm c) Not detected-0.02 ppm d) Not detected-0.02 ppm	a) 0.16 ppm b) 0.01 ppm c) 0.21 ppm d) 0.01 ppm	a) Pre-fledge, lipid basis, 10 cases b) Samples in a, fresh wt c) Post-fledge, lipid basis, 4 cases d) Samples in c), fresh wt Collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Knife Island GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Gull, laughing
LARUS ATRICILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6291 Carcass		a) 0.1-0.3 ppm b) Not detected Wet wt	a) Not given b) Not detected	a) 1980 b) 1981 Shot with steel shot at Atkinson Island, Little Pelican Island, and South Deer Island. Carcasses analyzed did not include skin, bills, feet, gastrointestinal tracts, livers, or kidneys. Mean for a) is geometric. Detection limit 0.1 ppm wet wt. Texas, Galveston Bay CC; GLC-EC
6292 Eggs	a) 20 b) 20	a) Not given b) Not detected	a) 0.1 ppm b) Not detected Wet wt	a) 1980. Detected in 1/20 b) 1981 Detection limit 0.1 ppm wet wt. Texas, Galveston Bay CC; GLC-EC
BIRDS; TEXAS; CHLORINE ORGANIC COMPOUNDS; ENVIRONMENTAL EXPOSURE; AQUATIC; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDD; DDE; DIELDRIN; STYRENES; PESTICIDE RESIDUES; WATER POLLUTION; EGGS; BODY King, K.A.; Krynitsky, A.J. 1986 Archives of Environmental Contamination and Toxicology 15:367-376				

Gull, ring-billed
LARUS DELAWARENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6293 Blood	10	a) Not detected-1.72 ppm b) Not detected-0.01 ppm	a) 0.35 ppm b) 0.00 ppm	a) Lipid basis b) Fresh wt From pre-fledglings collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Duluth-Superior Harbor GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320				

Tissue	Cases Exposure Route	Range	Mean	General Information
6294 Brain	1	Not applicable	0.13 ug/g Wet wt	From group found dead or dying, Umatilla National Wildlife Refuge, 1989. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Gull, ring-billed
LARUS DELAWARENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6295 Eggs	10	0.01-0.09 ppm Fresh wt	0.03 ppm Fresh wt	Collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Duluth-Superior Harbor GC
6296 Muscle		a) Not detected-0.13 ppm b) Not detected-0.01 ppm c) 0.21-0.25 ppm d) 0.02-0.02 ppm	a) 0.08 ppm b) 0.00 ppm c) 0.23 ppm d) 0.02 ppm	a) Pre-fledge, lipid basis, 10 cases b) Samples in a, fresh wt c) Post-fledge, lipid basis, 2 cases d) Samples in c), fresh wt Collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Duluth-Superior Harbor GC

ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE
Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320

Haddock
MELANOGRAMMUS AEGLEFINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6297 Liver	7	3-13 ug/kg Wet wt	8+/-5 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION
Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Hare
LEPUS EROPAUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6298 Adipose	26	Not given	0.004 mg/kg	Sedentary populations from agricultural biotype with no industry present. Use prohibited since 1977. Detectable levels in 6 of 26. Germany, West GC

ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION
Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Heron, black-crowned night
NYCTICORAX NYCTICORAX

Tissue	Cases Exposure Route	Range	Mean	General Information
6299 Brain	a) 1 b) 3 c) 1	a) Not detected b) Not detected c) Not detected	a) Not detected b) Not detected c) Not detected	a) Wisconsin, adult, 8/78 b) Nevada, adults, 7/75 (possible DDE poisoning, 1 bird) c) New Mexico, dead chick, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
6300 Carcass	a) 1 b) 3 c) 5 d) 1 e) 1 f) 3 g) 1	a) Not detected b) Not detected c) Not detected d) Not applicable e) Not detected f) Not detected-0.15 ppm g) Not detected Wet wt	a) Not detected b) Not detected c) Not detected d) 0.13 ppm e) Not detected f) Not detected g) Not detected Wet wt	a) Massachusetts, adult, possible paralytic shellfish poisoning, 9/72 b) Vermont, fledged immatures shot 8/70 c) Alabama, fledged immatures shot 7/70 d) Michigan, adult shot 5/70 e) Wisconsin, adult, 8/78 f) Nevada, adults, 7/75 (possible DDE poisoning, 1 bird) g) New Mexico, dead chick, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Heron, great blue
ARDEA HERODIAS

Tissue	Cases Exposure Route	Range	Mean	General Information
6301 Brain	a) 3 b) 3 c) 3 d) 1 e) 1 f) 3 g) 14 h) 3	a) Not detected b) Not detected-0.18 ppm c) Not detected d) Not detected e) Not detected f) Not detected g) Not detected-0.17 ppm h) Not detected-0.20 ppm Wet wt	a) Not detected b) Not applicable c) Not detected d) Not detected e) Not detected f) Not detected g) Not applicable h) Not applicable	a) Maryland, adult and fledged immatures, 6/70-8/73 b) Virginia, adults, possible dieldrin poisoning (2 birds), 1970-5/74 c) Florida, adults and fledged immature, possible dieldrin poisoning (1 bird), 2/73 d) North Carolina, adult, DDT poisoning, 2 76 e) Illinois, adult, dieldrin poisoning, 6/77 f) Michigan, adult and fledged immatures shot 8/73 g) Minnesota, adults, chicks and immature, dieldrin (3 birds) and endrin (1) poisoning, 4/72-6/76 h) Wisconsin, adults, possible dieldrin (1 bird) and endrin (1) poisoning, 12/76-5/79 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
6302 Carcass	a) 2 b) 6 c) 5 d) 3 e) 1 f) 7 g) 15 h) 1	a) Not detected b) Not detected-0.10 ppm c) Not detected-0.13 ppm d) Not detected e) Not detected f) Not detected-1.30 ppm g) Not detected h) Not detected Wet wt	a) Not detected b) Not applicable c) Not applicable d) Not detected e) Not detected f) Not applicable g) Not detected h) Not detected Wet wt	a) Vermont, fledged immatures shot 8/70 b) Maryland, adults and fledged immatures collected 7/66-8/73 c) Virginia, adults, 1970-1/76 d) Florida, adults and fledged immature, 2/73 e) Illinois, adult, dieldrin poisoning, 6/77 f) Michigan, adults and fledged immatures shot 5/70, 8/73 g) Minnesota, adults, immature and chicks, dieldrin (3 birds) and endrin (1) poisoning, 4/72-6/76 h) Wisconsin, adult, 5/78 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Heron, green-backed
BUTORIDES STRIATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6303 Carcass	a) 1 b) 6 c) 4	a) Not detected b) Not detected c) Not detected	a) Not detected b) Not detected c) Not detected	a) Massachusetts, adult, possible paralytic shellfish poisoning, 9/72 b) Maryland, chicks, 6/69 c) Alabama, adults and fledged immature shot 7/70 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Heron, little blue
FLORIDA CAERULEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6304 Carcass	a) 6 b) 1	a) Not detected b) Not detected	a) Not detected b) Not detected	a) Alabama, fledged immatures shot 7/70 b) Louisiana, fledged immature, 7/71 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Heron, Louisiana
HYDRANASSA TRICOLOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6305 Carcass	a) 2 b) 1	a) Not detected b) Not detected	a) Not detected b) Not detected	a) Alabama, fledged immatures shot 7/70 b) Louisiana, fledged immature, 7/71 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Heron, yellow-crowned night
NYCTANASSA VIOLACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6306 Carcass	3	Not detected	Not detected	Alabama, adult and fledged immatures shot 7/70 Part of large study of organochlorines and mortality in herons. Detection limit 0.1 ppm. GLC
BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135				

Kittiwake, black-legged
RISSA TRIDACTYLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6307 Eggs	a) 11 b) 10 c) 10	a) Not given b) Not given c) Not given	a) 0.11+/-0.03 ug/g b) 0.14+/-0.06 ug/g c) 0.07+/-0.01 ug/g Wet wt	a) East Finnmark b) West Finnmark c) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Magpie, black-billed
PICA PICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6308 Brain	4	0.11-0.49 ug/g Wet wt	0.29 ug/g Wet wt	From group found dead or dying, Umatilla National Wildlife Refuge, 1976-1980. Oregon; Washington GLC
6309 Eggs	9	Not detected	Not detected	Collected from nests, 1978, Umatilla National Wildlife Refuge. Detection limit 0.1 ug/g. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Medaka, Japanese
ORYZIAS LATIPES

Tissue	Cases Exposure Route	Range	Mean	General Information
6310 Eggs		a) 8-14 ng/g b) 20-29 ng/g c) 48-49 ng/g d) 8-150 ng/g e) 220-350 ng/g Wet wt	a) Not given b) Not given c) Not given	a) 24-hr flow-through exposure, [14-C]-labeled compound (HCB) 0.0633-0.1063 ug/L, 1-10 d old eggs b) Same exposure, 11-12 d old eggs & fry c) Same exposure, 13 d old fry d) 1-13 d exposure, 0.0622 ug/L HCB, 1-13 d old eggs. Accumulation increased linearly with exposure time e) 24-hr exposure, 0.0765 ug/L HCB, fry, wt 0.8-75 mg. Accumulation highest in larvae 15-30 mg, lowest in newly hatched, 0.8 mg Estimated from graph. Longterm uptake (14 d) by fry also measured. Scintillation counting
FISHES; HEXACHLOROBENZENE; DELIBERATE EXPOSURE; EGGS; AQUATIC; BIOACCUMULATION Huang, Y.; Biddinger, G.R.; Gloss, S.P. 1986 Bulletin of Environmental Contamination and Toxicology 36:437-443				

Newt
TRITURUS VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6311 Adipose		a) Not given b) Not given	a) 4.12 mg/kg b) 4.20 mg/kg Wet wt	a) Collected 5/77 b) 6/77 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany, south Scintillation counting
6312 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 2.67 mg/kg b) 2.38 mg/kg c) 0.042 mg/kg d) 0.051 mg/kg e) 0.083 mg/kg f) 0.067 mg/kg g) 0.036 mg/kg Wet wt	a) Collected 5/77 b) 6/77 c) 6/78 d) 8/78 e) 9/78 f) 10/78 g) 5/79 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6313 Gastrointestinal tract		a) Not given b) Not given	a) 3.97 mg/kg b) 2.98 mg/kg Wet wt	a) Collected 5/77 b) 6/77 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Newt
TRITURUS VULGARIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6314 Head		a) Not given b) Not given	a) 2.36 mg/kg b) 1.14 mg/kg Wet wt	a) Collected 5/77 b) 6/77 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6315 Kidney		a) Not given b) Not given	a) 2.09 mg/kg b) 1.47 mg/kg Wet wt	a) Collected 5/77 b) 6/77 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6316 Liver		a) Not given b) Not given c) Not given	a) 4.18 mg/kg b) 3.74 mg/kg c) 0.12 mg/kg Wet wt	a) Collected 5/77 b) 6/77 c) 5/79 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6317 Muscle		a) Not given b) Not given	a) 1.68 mg/kg b) 1.08 mg/kg Wet wt	a) Collected 5/77 b) 6/77 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6318 Skin		a) Not given b) Not given	a) 3.91 mg/kg b) 1.22 mg/kg Wet wt	a) Collected 5/77 b) 6/77 From experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting

DELIBERATE EXPOSURE; AQUATIC; HEXACHLOROBENZENE; WATER POLLUTION; PESTICIDES; GERMANY; INSECTS; NEWTS; AMPHIBIANS; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WINGS; HEAD; MUSCLES; GASTROINTESTINAL SYSTEM; ADIPOSE TISSUE; BODY; THORAX; GONADS; LIVER; SKIN

Schauerte, W.; Lay, J.P.; Klein, W.; Korte, F. 1982 Ecotoxicology and Environmental Safety 6:560-569

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Osprey
PANDION HALIAETUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6319 Eggs	7	0-91 ng/g Wet wt	17.3+/-32.7 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC

BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE

Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491

Partridge
PERDIX PERDIX

Tissue	Cases Exposure Route	Range	Mean	General Information
6320 Adipose	17	Not given	0.002 mg/kg	Sedentary populations from agricultural biotype with no industry present. Use prohibited since 1977. Detectable levels in 3 of 17. Germany, West GC

ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION

Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6321 Body	73	0.0-0.233 mg/kg	0.001 mg/kg	Collected fall of 1980 and spring of 1981. In 42% of total. Maximum permissible level=0.050 mg/kg. Germany (West), Lahn River GC/MS

BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION

Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Pheasant, ring-necked
PHASIANUS COLCHICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6322 Adipose	4	Not given	0.003 mg/kg	Sedentary populations from agricultural biotype with no industry present. Use prohibited since 1977. Detectable levels in 2 of 4. Germany, West GC

ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION

Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532

Tissue	Cases Exposure Route	Range	Mean	General Information
6323 Body	a) 5 b) 5 c) 5 d) 5 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.005 ppm b) 0.005 ppm c) 0.005 ppm d) 0.005 ppm e) Trace	a) Wichita County b) Butler County c) Sedgwick County d) Washington County e) Sumner, Rooks, Phillips, Smith Counties Collection sites. Trace quantities in control counties, where low pesticide use was identified. No significant accumulation. Kansas

BODY; PHEASANTS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; KANSAS; HEXACHLOROBENZENE; HEPTACHLOR EPOXIDE; DIELDRIN; ANIMAL FEEDS; BIOACCUMULATION; LAND POLLUTION; PESTICIDE RESIDUES; BIOLOGICAL MONITORING

Layher, W.G.; Wood, R.D.; Lambley, D.; Bell, K.O.; Irwin, J.C.; Hammerschmidt, R.F. 1985 Bulletin of Environmental Contamination and Toxicology 34:317-322

Tissue	Cases Exposure Route	Range	Mean	General Information
6324 Brain	4	0.55-1.3 ug/g Wet wt	0.77 ug/g Wet wt	From group found dead or dying, Umatilla National Wildlife Refuge, 1976-1977. Oregon; Washington GLC
6325 Eggs	a) 5 b) 10 c) 2	a) Not detected-0.48 ug/g b) Not detected-0.10 ug/g c) Not detected Wet wt	a) 0.15 ug/g b) Not given c) Not detected Geometric Wet wt	a) 1978, 3 positive b) 1979, 1 positive c) 1980 Collected from nests, Umatilla National Wildlife Refuge. Detection limit 0.1 ug/g. Oregon; Washington GLC

ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN

Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6326 Body		a) Not applicable b) Not applicable	a) 2.19 mg/kg b) 0.13 mg/kg	a) Ashtabula River, OH, 10/28/81 b) Sheboygan River WI, 9/30/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Tissue	Cases Exposure Route	Range	Mean	General Information
6327 Liver	1	Not applicable	4 mg/kg Lipid basis	Collected at Lake Seto Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES

Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Puffin, Atlantic
FRATERCULA ARCTICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6328 Eggs	a) 11 b) 10 c) 10 d) 20	a) Not given b) Not given c) Not given d) Not given	a) 0.09+/-0.03 ug/g b) 0.13+/-0.03 ug/g c) 0.09+/-0.02 ug/g d) 0.09+/-0.02 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING

Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Quail, California
CALLIPEPLA CALIFORNICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6329 Brain	1	Not applicable	0.29 ug/g Wet wt	From group found dead or dying, Umatilla National Wildlife Refuge, 1976. Oregon; Washington GLC
6330 Eggs	1	Not detected	Not detected	Collected from nests, 1978, Umatilla National Wildlife Refuge. Detection limit 0.1 ug/g. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6331 Adipose		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) 395.5 b) 361.8 c) 363.8 d) 420.2 e) 33.3 f) 15.3 g) 15.4 h) 0.6 dpm/mg	a) 4 hr after single dose of 4.5 uCi/100 g body wt b) 24 hr c) 4 d d) 8 d e) 21 d f) 36 d g) 59 d h) 85 d Administered as [14-C]-labelled compound. Healthy, 3 mo old, 150-230 g animals maintained under controlled conditions.
6332 Bile		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 12.9 b) 31.1 c) 23.7 d) 26.6 e) 0.2 f) 0.2 dpm/mg	a) 4 hr after single dose of 4.5 uCi/100 g body wt b) 24 hr c) 4 d d) 8 d e) 21 d f) 59 d Administered as [14-C]-labelled compound. Healthy, 3 mo old, 150-230 g animals maintained under controlled conditions.

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Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Quail, Japanese
COTURNIX COTURNIX JAPONICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6333 Brain	a) 1 b) 1 c) 1 d) 1 e) 1 f) 1 g) 1 h) 1 i) 1 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 6.5 b) 6.8 c) 12.0 d) 20.1 e) 15.8 f) 4.1 g) 0.5 h) 0.2 i) 0.1 dpm/mg	a) 4 hr after single dose of 4.5 uCi/100 g body wt b) 6 hr c) 24 hr d) 4 d e) 8 d f) 21 d g) 36 d h) 59 d i) 85 d Administered as [14-C]-labelled compound. Healthy, 3 mo old, 150-230 g animals maintained under controlled conditions. Scintillation counting
6334 Liver	a) 1 b) 1 c) 1 d) 1 e) 1 f) 1 g) 1 h) 1 i) 1 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 35.3 b) 34.0 c) 25.3 d) 29.1 e) 13.1 f) 0.6 g) 0.7 h) 1.1 i) 0.0 dpm/mg	a) 4 hr after single dose of 4.5 uCi/100 g body wt b) 6 hr c) 24 hr d) 4 d e) 8 d f) 21 d g) 36 d h) 59 d i) 85 d Administered as [14-C]-labelled compound. Healthy, 3 mo old, 150-230 g animals maintained under controlled conditions. Scintillation counting
6335 Muscle	a) 1 b) 1 c) 1 d) 1 e) 1 f) 1 g) 1 h) 1 i) 1 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 10.2 b) 6.5 c) 3.1 d) 20.3 e) 10.9 f) 0.4 g) 0.5 h) 0.2 i) 0.2 dpm/mg	a) 4 hr after single dose of 4.5 uCi/100 g body wt b) 6 hr c) 24 hr d) 4 d e) 8 d f) 21 d g) 36 d h) 59 d i) 85 d Administered as [14-C]-labelled compound. Healthy, 3 mo old, 150-230 g animals maintained under controlled conditions. Scintillation counting

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Quail, Japanese
COTURNIX COTURNIX JAPONICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6336 Uropygial gland	a) 1 b) 1 c) 1 d) 1 e) 1 f) 1 g) 1 h) 1 i) 1 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 53.9 b) 106.4 c) 130.4 d) 291.6 e) 242.5 f) 10.3 g) 5.8 h) 5.9 i) 0.4 dpm/mg	a) 4 hr after single dose of 4.5 uCi/100 g body wt b) 6 hr c) 24 hr d) 4 d e) 8 d f) 21 d g) 36 d h) 59 d i) 85 d Administered as [14-C]-labelled compound. Healthy, 3 mo old, 150-230 g animals maintained under controlled conditions. Scintillation counting
DELIBERATE EXPOSURE; TERRESTRIAL; QUAIL; BIRDS; INGESTION; LIVER; MUSCLES; ADIPOSE TISSUE; BRAIN; UROPYGIAL GLAND; BILE; HEXACHLOROBENZENE Ingebrigtsen, K.; Brevik, E.M.; Nafstad, I. 1981 Journal of Toxicology and Environmental Health 8:845-856				

Rat

Tissue	Cases Exposure Route	Range	Mean	General Information
6337 Adipose	6 Ingestion	2000-20,000 ng/g	Not given	40 d and 24 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6338 Blood	6 Ingestion	60-550 ng/g	Not given	40 d and 4 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6339 Body	6 Ingestion	16-400 ug	Not given	Body burden at 40 and 0 d after feeding of 0.2 mg in 1 ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6340 Brain	6 Ingestion	400-8000 ng/g	Not given	40 d and 6 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6341 Kidney	6 Ingestion	200-1000 ng/g	Not given	40 d and 24 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Rat

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6342 Liver	6 Ingestion	75-1000 ng/g	Not given	40 d and 6 hr after feeding of 0.2 mg in ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
6343 Urine	8 Ingestion	15-96 ng	Not given	Cumulative excretion, days 1 and 6 after feeding of 0.2 mg in 1 ml of corn oil to 5 wk old Wistar rats. Japan GC-EC
DELIBERATE EXPOSURE; RATS; JAPAN; TERRESTRIAL; ADIPOSE TISSUE; BODY; BLOOD; BRAIN; LIVER; KIDNEYS; URINE; INGESTION; CHLOROBENZENES; BROMOBENZENES; HEXACHLOROBENZENE; HEXABROMOBENZENE Yamaguchi, Y.; Kawano, M.; Tatsukawa, R. 1986 Chemosphere 15(4):453-459				

Razorbill
ALCA TORDA

Tissue	Cases Exposure Route	Range	Mean	General Information
6344 Eggs	9	Not given	0.17+/-0.05 ug/g	Collected in West Finnmark, 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Reindeer
RANGIFER sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6345 Body	2 Ingestion	13.76-22.4 ug	18.08 ug	Total burden in 3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 330 ug. Means calculated by extractor. Sweden, Lake Rogen district
6346 Liver	2 Ingestion	0.47-1.37 ng/g	0.92 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 330 ug. Means calculated by extractor. Sweden, Lake Rogen district

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Reindeer
RANGIFER sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6347 Muscle	2 Ingestion	0.545-0.86 ng/g	0.70 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 330 ug. Means calculated by extractor. Sweden, Lake Rogen district
ENVIRONMENTAL EXPOSURE; DEER; BODY; MUSCLES; LIVER; SWEDEN; TERRESTRIAL; FOOD CONTAMINATION; ANIMAL FEEDS; POLYCHLORINATED BIPHENYLS; DDD; DDE; LINDANE; HEXACHLOROBENZENE; PESTICIDES Villeneuve, J.P.; Holm, E.; Cattini, C. 1985 Chemosphere 14(11/12):1651-1658				

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6348 Body	227	0.0-0.233 mg/kg	0.001 mg/kg	Collected fall of 1980 and spring of 1981. In 42% of total. Maximum permissible level=0.050 mg/kg. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616				

Salmon, Baltic
SALMO SALAR

Tissue	Cases Exposure Route	Range	Mean	General Information
6349 Eggs	a) 15 b) 3 c) 10	a) 6-30 ppb b) 9-16 ppb c) 4-14 ppb Wet wt	a) 18.7+/-6.32 ppb b) 12.0+/-3.61 ppb c) 7.60+/-3.47 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg egg fat 5.13-5.68%. GC-EC

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Salmon, Baltic
SALMO SALAR

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6350 Liver	a) 15 b) 3 c) 10	a) 3-15 ppb b) 1-12 ppb c) 1-4 ppb Wet wt	a) 5.47+/-3.04 ppb b) 6.67+/-5.51 ppb c) 2.90+/-0.99 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg liver fat 2.06-2.37%. Finland, Baltic Sea GC-EC
6351 Muscle	a) 14 b) 3 c) 10	a) 10-32 ng/g b) 4-20 ng/g c) 3-10 ng/g Wet wt	a) 19.3+/-6.34 ng/g b) 9.67+/-8.96 ng/g c) 5.10+/-2.13 ng/g Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg muscle fat 4.02-5.43% Finland, Baltic Sea GC-EC

FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES

Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740

Scorpion, sea
MYOXOCEPHALUS SCORPIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6352 Liver	6	Not detected-8 ug/kg Wet wt	3+/-3 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION

Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Shag
PHALACROCORAX ARISTOTELIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6353 Eggs	a) 10 b) 10	a) Not given b) Not given	a) 0.02+/-0.01 ug/g b) 0.02+/-0.00 ug/g Wet wt	a) East Finnmark b) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Shearwater, Cory's
CALONECTRIS DIOMEDEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6354 Adipose	a) 5 b) 5 c) 5	a) Not given b) Not given c) Not given	a) 0.442+/-0.135 ug/g b) 0.097+/-0.048 ug/g c) 0.107+/-0.035 ug/g Dry wt	a) Majorca Island, Mediterranean, 5/84 b) Linosa Island, Mediterranean, 5/82 c) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Shearwater, Cory's
CALONECTRIS DIOMEDEA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6355 Brain	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.009+/-0.005 ug/g b) 0.049+/-0.015 ug/g c) 0.017+/-0.006 ug/g d) 0.077+/-0.092 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6356 Eggs	a) 20 b) 10 d) 11 d) 2	a) Not given b) Not given c) Not given d) 0.035-0.048 ug/g Dry wt	a) 0.045+/-0.015 ug/g b) 0.036+/-0.016 ug/g c) 0.072+/-0.016 mg/g d) Not given Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6357 Kidney	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.003+/-0.001 ug/g b) 0.032+/-0.012 ug/g c) 0.005+/-0.001 ug/g d) 0.008+/-0.005 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6358 Liver	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.005+/-0.001 ug/g b) 0.040+/-0.019 ug/g c) 0.012+/-0.005 ug/g d) 0.006+/-0.002 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6359 Muscle	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.008+/-0.003 ug/g b) 0.083+/-0.048 ug/g c) 0.13+/-0.004 ug/g d) 0.011+/-0.008 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Shearwater, Cory's
CALONECTRIS DIOMEDEA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6360 Uropygial gland	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.043+/-0.018 ug/g b) 0.201+/-0.041 ug/g c) 0.049+/-0.020 ug/g d) 0.052+/-0.008 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
ENVIRONMENTAL EXPOSURE; BIRDS; ATLANTIC OCEAN; MEDITERRANEAN SEA; AQUATIC; EGGS; BRAIN; MUSCLES; KIDNEYS; LIVER; UROPYGIAL GLAND; ADIPOSE TISSUE; MERCURY; CADMIUM; LEAD; ZINC; SELENIUM; HEXACHLOROBENZENE; DDE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; WATER POLLUTION; METALS; PESTICIDES Renzoni, A.; Focardi, S.; Fossi, C.; Leonzio, C.; Mayol, J. 1986 Environmental Pollution (Series A) 40:17-35				

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6361 Adipose	5 Ingestion	Not given	0.37 ug/g	Grazed 180 days on 0.57 ha plot of bluegrass contaminated in 10/75, 6 mo before start of grazing. Means of groups grazed 60 days each ranged from 0.30+/-0.12-0.36+/-0.16 ug/g. Subcutaneous and omental fats. GC
DELIBERATE EXPOSURE; TERRESTRIAL; SHEEP; ADIPOSE TISSUE; PESTICIDES; DDE; HEXACHLOROBENZENE; POLYBROMINATED BIPHENYLS; PESTICIDE RESIDUES; INDUSTRIAL CHEMICALS Fries, G.F.; Marrow, G.S. 1982 Journal of Animal Science 55(5):1118-1124				

Skimmer, black
RHYNCHOPS NIGER

Tissue	Cases Exposure Route	Range	Mean	General Information
6362 Carcass		a) Not detected b) Not detected c) Not detected	a) Not detected b) Not detected c) Not detected	a) 1980 b) 1981 c) 1982 Shot with steel shot at Atkinson Island, Little Pelican island, and near Swan Lake. Carcasses analyzed did not include skin, bills, feet, gastrintestinal tracts, livers, or kidneys. Detection limit 0.1 ppm wet wt. Texas, Galveston Bay CC; GLC-EC
BIRDS; TEXAS; CHLORINE ORGANIC COMPOUNDS; ENVIRONMENTAL EXPOSURE; AQUATIC; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDD; DDE; DIELDRIN; STYRENES; PESTICIDE RESIDUES; WATER POLLUTION; EGGS; BODY King, K.A.; Krynitsky, A.J. 1986 Archives of Environmental Contamination and Toxicology 15:367-376				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Sole, lemon
MICROSTOMAS KITT

Tissue	Cases Exposure Route	Range	Mean	General Information
6363 Liver	10	1-2 ug/kg Wet wt	1+/-0.3 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION
Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Starling
STURNUS VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6364 Adipose	a) 49 b) 50 c) 26 d) 21 e) 24	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 69.4+/-196 ppb b) 52.5+/-42 ppb c) 32.6+/-28 ppb d) 63.7+/-21 ppb e) 43.2+/-19 ppb Fat basis	a) 1978 b) 1979 c) 1981 d) 1982 e) 1983 Years collected from nests, immediately prior to flight. Detection limit 0.5 ng/g (ppb). Finland GC-EC

MUSCLES; ADIPOSE TISSUE; BIRDS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FINLAND; JUVENILES; CHLORINATED HYDROCARBONS; DDD; DDE; DDT; HEXACHLOROBENZENE; MERCURY; LINDANE; OXYCHLORDANE; BIOACCUMULATION; PESTICIDES; PESTICIDE RESIDUES
Paasivirta, J.; Paukku, R.; Surma-Aho, K.; Welling, L. 1985 Chemosphere 14(5):457-468

Tissue	Cases Exposure Route	Range	Mean	General Information
6365 Eggs	19	Not detected	Not detected	Collected from nests, 1978, Umatilla National Wildlife Refuge. Detection limit 0.1 ug/g. Oregon; Washington GLC

ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN
Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Starling
STURNUS VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6366 Muscle	a) 49 b) 50 c) 26 d) 21 e) 24	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.24+/-3.50 ppb b) 2.00+/-1.37 ppb c) 1.19+/-1.13 ppb d) 1.24+/-0.768 ppb e) 0.917+/-0.282 ppb Wet wt	a) 1978 b) 1979 c) 1981 d) 1982 e) 1983 Years collected from nests, immediately prior to flight. Detection limit 0.5 ng/g (ppb). Finland GC-EC
MUSCLES; ADIPOSE TISSUE; BIRDS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FINLAND; JUVENILES; CHLORINATED HYDROCARBONS; DDD; DDE; DDT; HEXACHLOROBENZENE; MERCURY; LINDANE; OXYCHLORDANE; BIOACCUMULATION; PESTICIDES; PESTICIDE RESIDUES Paasivirta, J.; Paukku, R.; Surma-Aho, K.; Welling, L. 1985 Chemosphere 14(5):457-468				

Sucker, redhorse
MOXOSTOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6367 Body		Not applicable	<0.002 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
6368 Body		Not applicable	0.004 mg/kg	Chequamegon Bay, Lake Superior, WI, 8/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Swallow, tree
TACHYCINETA BICOLOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6369 Carcass	14	Not detected-0.02 ppm Wet wt	0.01+/-0.01 ppm Wet wt S.E.	Detected in of 2 composite samples. Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.05 ppm wet wt. Colorado; Oregon; Montana GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Tern, common
STERNA HIRUNDO

Tissue	Cases Exposure Route	Range	Mean	General Information
6370 Blood	5	a) Not detected-0.29 ppm b) Not detected-0.01 ppm	a) 0.20 ppm b) 0.00 ppm	a) Lipid basis b) Fresh wt From pre-fledglings collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Duluth-Superior Harbor GC
6371 Eggs	10	0.02-0.37 ppm Fresh wt	0.06 ppm Fresh wt	Collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Duluth-Superior Harbor GC
6372 Muscle		a) 0.08-0.12 ppm b) 0.01-0.01 ppm c) Not detected-0.25 ppm d) Not detected-0.02 ppm	a) 0.09 ppm b) 0.01 ppm c) 0.17 ppm d) 0.01 ppm	a) Pre-fledge, lipid basis, 5 cases b) Samples in a, fresh wt c) Post-fledge, lipid basis, 7 cases d) Samples in c), fresh wt Collected in 1977 nesting season. Detection limit 0.005 ppm. Lake Superior, Duluth-Superior Harbor GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Trout, Bothnian Bay
SALMO TRUTTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6373 Eggs	11	6-14 ppb Wet wt	9.45+/-2.42 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg egg fat 2.72%. Finland, Baltic Sea GC-EC
6374 Liver	11	1-5 ppb Wet wt	3.27+/-1.10 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg liver fat 2.72%. Finland, Baltic Sea GC-EC
6375 Muscle	11	1-9 ppb Wet wt	4.91+/-2.26 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg muscle fat 3.15%. Finland GC-EC
FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740				

Trout, lake
SALVELINUS NAMAYCUSH

Tissue	Cases Exposure Route	Range	Mean	General Information
6376 Fillets	3	0.009-0.011 ppm	0.010+/-0.008 ppm	Included skin. Range, mean are of 10 replicates. Whole wt basis. % lipid was 17.1+/-0.084, range 16.95-17.25. Lake Michigan GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; FILLETS; MEASUREMENT METHODS; LAKE MICHIGAN; POLYCHLORINATED BIPHENYLS; OXYCHLORDANE; CHLORDANE; NONACHLOR; TOXAPHENE; HEPTACHLOR EPOXIDE; DDE; DDT; DDD; DIELDRIN; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; INDUSTRIAL CHEMICALS; WATER POLLUTION Price, H.A.; Welch, R.L.; Scheel, R.H.; Warren, L.A. 1986 Bulletin of Environmental Contamination and Toxicology 37:1-9				

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Walleye
STIZOSTEDION VITREUM VITREUM

Tissue	Cases Exposure Route	Range	Mean	General Information
6377 Body		a) Not applicable b) Not applicable c) Not applicable	a) 0.004 mg/kg b) 0.013 mg/kg c) 0.004 mg/kg	a) Wolf River, WI, 9/15/80 b) Fox River, WI, below DePere, 10/15/80 c) Chequamegon Bay, Lake Superior, WI, 8/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Waterbug
DYTISCUS MARGINALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6378 Adipose		a) Not given b) Not given c) Not given d) Not given	a) 1.87 mg/kg b) 0.33 mg/kg c) 0.16 mg/kg d) 0.10 mg/kg Wet wt	a) Females, 4/77 b) Males, 11/77 c) Males, 10/78 d) Males, 5/79 Dates of Collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Values for extremities were, for each respective date, 0.06, 0.22, 0.08, 0.071 mg/kg. Germany (southern)
6379 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.37 mg/kg b) 0.16 mg/kg c) 0.17 mg/kg d) 0.11 mg/kg e) 0.076 mg/kg Wet wt	a) Females, 4/77 b) Males, 11/77 c) Females, 5/78 d) Males, 10/78 e) Males, 5/79 Dates of Collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6380 Gastrointestinal tract		a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.57 mg/kg b) 0.063 mg/kg c) 0.22 mg/kg d) 0.17 mg/kg e) 0.11 mg/kg Wet wt	a) Females, 4/77 b) Males, 11/77 c) Females, 5/78 d) Males, 10/78 e) Males, 5/79 Dates of Collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Waterbug
DYTISCUS MARGINALIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6381 Gonads		a) Not given b) Not given	a) 4.7 mg/kg b) 0.11 mg/kg Wet wt	a) Females, 4/77 b) Males, 5/78 Dates of collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern)
6382 Head		a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.75 mg/kg b) 0.038 mg/kg c) 0.08 mg/kg d) 0.09 mg/kg e) 0.09 mg/kg Wet wt	a) Females, 4/77 b) Males, 11/77 c) Females, 5/78 d) Males, 10/78 e) Males, 5/79 Dates of Collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6383 Muscle		a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.54 mg/kg b) 0.11 mg/kg c) 0.13 mg/kg d) 0.15 mg/kg e) 0.074 mg/kg Wet wt	a) Females, 4/77 b) Males, 11/77 c) Females, 5/78 d) Males, 10/78 e) Males, 5/79 Dates of Collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
6384 Thorax		a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.39 mg/kg b) 0.08 mg/kg c) 0.06 mg/kg d) 0.09 mg/kg e) 0.09 mg/kg Wet wt	a) Females, 4/77 b) Males, 11/77 c) Females, 5/78 d) Males, 10/78 e) Males, 5/79 Dates of Collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Values for extremities were, for each respective date: 0.73, 0.06, 0.22, 0.08, 0.071 mg/kg. Germany (southern) Scintillation counting

(next page)

Benzene, hexachloro-
118-74-1
C6-Cl6
MW 284.80, MP 231 C, BP 323-326 C, VP 1 mm Hg at 114.4 C

Waterbug
DYTISCUS MARGINALIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6385 Wing		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.70 mg/kg b) 0.25 mg/kg c) 0.21 mg/kg d) 0.058 mg/kg e) 1.78 mg/kg f) 0.16 mg/kg g) 0.25 mg/kg Wet wt	a) Elytrum, females, 4/77 b) Males, 11/77 c) Females, 5/78 d) Males, 5/79 e) Main wings, females, 4/77 f) Males, 11/77 g) Females, 5/78 Dates of collection from experimentally polluted pond previously treated with 50 ug/L over 4-6 wk (total applied 250 ug/L). Germany (southern) Scintillation counting
DELIBERATE EXPOSURE; AQUATIC; HEXACHLOROBENZENE; WATER POLLUTION; PESTICIDES; GERMANY; INSECTS; NEWTS; AMPHIBIANS; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WINGS; HEAD; MUSCLES; GASTROINTESTINAL SYSTEM; ADIPOSE TISSUE; BODY; THORAX; GONADS; LIVER; SKIN Schauerte, W.; Lay, J.P.; Klein, W.; Korte, F. 1982 Ecotoxicology and Environmental Safety 6:560-569				

Woodcock
SCOLOPAX RUSTICOLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6386 Adipose	8	Not given	0.018 mg/kg	Use prohibited since 1977. Detectable levels in 7 of 8. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Wrasse, ballan
LABRUS BERGGYLTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6387 Liver	a) 10 b) 10	Not detected-5 ug/kg Wet wt	1+/-2 ug/kg Wet wt	a) 1977 b) 1982 Year of collection in Sogndalsfjord. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Benzene, pentachloro-
608-93-5
C6-H-Cl5
MW 250.34, MP 86 C, BP 277 C

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6388 Eggs		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2 ppb b) 15 ppb c) 10 ppb d) 19 ppb e) 162 ppb f) 34 ppb Wet wt	a) Kent Island, Bay of Fundy b) Agawa Rock, Lake Superior c) Chantry Island, Lake Huron d) Presqu'ile, Lake Ontario e) Channel-Shelter Island, Saginaw Bay f) Fighting Island, Detroit River Pooled homogenates from 15-25 eggs. Collected 1981. Great Lakes, Atlantic Ocean GC

ENVIRONMENTAL EXPOSURE; AQUATIC; EGGS; GREAT LAKES; WATER POLLUTION; PESTICIDES; BIRDS; HEXACHLOROBENZENE; HEPTACHLOR EPOXIDE; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; DIELDRIN; OXYCHLORDANE

Ellenton, J.A.; Brownlee, L.J.; Hollebone, B.R. 1985 Environmental Toxicology and Chemistry 4:615-622

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6389 Body	73	Not given	Trace	Collected in fall of 1980 and spring of 1981. In 2.6% of total. Maximum permissible level=0.010 mg/kg. Trace levels <0.001 mg/kg. Germany (West), Lahn River GC/MS

BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION

Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616

Pheasant, ring-necked
PHASIANUS COLCHICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6390 Body	a) 5 b) 5	a) Not given b) Not given	a) 0.006 ppm b) Trace	a) Marshall County b) Washington County Collection sites. Counties identified as areas of high pesticide use. No significant accumulation. Kansas

BODY; PHEASANTS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; KANSAS; HEXACHLOROBENZENE; HEPTACHLOR EPOXIDE; DIELDRIN; ANIMAL FEEDS; BIOACCUMULATION; LAND POLLUTION; PESTICIDE RESIDUES; BIOLOGICAL MONITORING

Layher, W.G.; Wood, R.D.; Lambley, D.; Bell, K.O.; Irwin, J.C.; Hammerschmidt, R.F. 1985 Bulletin of Environmental Contamination and Toxicology 34:317-322

Benzene, pentachloro-

608-93-5
C6-H-Cl5
MW 250.34, MP 86 C, BP 277 C

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6391 Body	227	Not given	Trace	Collected in fall of 1980 and spring of 1981. In 2.6% of total. Maximum permissible level=0.010 mg/kg. Trace levels <0.001 mg/kg. Germany (West), Lahn River GC/MS

BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION

Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616

Woodcock
SCOLOPAX RUSTICOLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6392 Adipose	8	Not given	0.015 mg/kg	Metabolite of HCB. Use of HCB prohibited since 1977. Detectable levels in 2 of 8. Germany, West GC

ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION

Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532

Benzene, tetrachloro- (No postings in CHEMLINE).

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6393 Eggs		a) Not given b) Not given c) Not given	a) 85 ppb b) 779 ppb c) 10 ppb Wet wt	a) Agawa Rock, Lake Superior b) Channel-Shelter Island, Saginaw Bay c) Fighting Island, Detroit River Pooled homogenates from 15-25 eggs. Collected 1981. Mixture of 1,2,3,4-, 1,2,3,5-, 1,2,4,5,-isomers. Great Lakes GC

ENVIRONMENTAL EXPOSURE; AQUATIC; EGGS; GREAT LAKES; WATER POLLUTION; PESTICIDES; BIRDS; HEXACHLOROBENZENE; HEPTACHLOR EPOXIDE; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; DIELDRIN; OXYCHLORDANE

Ellenton, J.A.; Brownlee, L.J.; Hollebone, B.R. 1985 Environmental Toxicology and Chemistry 4:615-622

Benzene, 1-chloro-2-((4-chlorophenyl)difluoromethyl)-4-(trifluoromethyl)-
95998-70-2
C14-H7-Cl2-F5
Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
6394 Body		1-850 ng/g Fat basis	Not given	Sites: Lake Ontario at Salmon River, Niagara River at Fort Niagara, Niagara River at Lewiston, Little Niagara River. Collected in Fall of 1979, those from Little Niagara River in June, 1983. Sedentary species (such as carp, bass) and a few salmon. New York GC/MS

AQUATIC; FISHES; ENVIRONMENTAL EXPOSURE; BODY; WATER POLLUTION; BIPHENYL COMPOUNDS
Jaffe, R.; Hites, R.A. 1985 Environmental Science and Technology 19(8):736-740

Benzene, 1,2,3,4-tetrachloro-
634-66-2
C6-H2-Cl4
MW 215.90, MP 47.5 C, BP 254 C at 760 mm Hg, VP 1 mm at 68.5 C
Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
6395 Body	10	Not given	1.0+/-0.4 ng/g	Comparison of laboratory- and field-derived bioconcentration factors (BCFs) for 34 chemicals showed predictions based on lab BCFs useful for chemicals with short half-lives but too low for long half-life chemicals where contaminated food is major source. Lake Ontario, Ganaraska River CC; EC

FISHES; ENVIRONMENTAL EXPOSURE; BIOCONCENTRATION; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WATER POLLUTION; POLYCHLORINATED BIPHENYLS
Oliver, B.G.; Niimi, A.J. 1985 Environmental Science and Technology 19:842-849

Benzene, 1,2,3,5-tetrachloro-
634-90-2
C6-H2-Cl4
MW 215.90, MP 54.5 C, BP 246 C, VP 1 mm Hg at 58.2 C
Reindeer
RANGIFER sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6396 Body	2 Ingestion	416.7-425 ug	420.85 ug	Total burden in 3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 21600 ug. Means calculated by extractor. Sweden, Lake Rogen district

(next page)

Benzene, 1,2,3,5-tetrachloro-
634-90-2
C6-H2-Cl4
MW 215.90, MP 54.5 C, BP 246 C, VP 1 mm Hg at 58.2 C

Reindeer
RANGIFER sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6397 Liver	2 Ingestion	6.2-8.6 ng/g	7.4 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 21600 ug. Means calculated by extractor. Sweden, Lake Rogen district
6398 Muscle	2 Ingestion	17-17.2 ng/g	17.1 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 21600 ug. Means calculated by extractor. Sweden, Lake Rogen district
ENVIRONMENTAL EXPOSURE; DEER; BODY; MUSCLES; LIVER; SWEDEN; TERRESTRIAL; FOOD CONTAMINATION; ANIMAL FEEDS; POLYCHLORINATED BIPHENYLS; DDD; DDE; LINDANE; HEXACHLOROBENZENE; PESTICIDES Villeneuve, J.P.; Holm, E.; Cattini, C. 1985 Chemosphere 14(11/12):1651-1658				

Benzene, 1,2,4-trichloro-
120-82-1
C6-H3-Cl3
MW 181.46, MP 17 C, BP 213 C, VP 1 mm Hg at 38.4 C

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6399 Body		Not given	140 ppb Wet wt	Composite sample, collected 5/80-6/80, Chef Menteur Pass at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Benzene, 1,2,4-trichloro-
120-82-1
C6-H3-Cl3
MW 181.46, MP 17 C, BP 213 C, VP 1 mm Hg at 38.4 C

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
6400 Body	10	Not given	0.6+/-0.3 ng/g	Comparison of laboratory- and field-derived bioconcentration factors (BCFs) for 34 chemicals showed predictions based on lab BCFs useful for chemicals with short half-lives but too low for long half-life chemicals where contaminated food is major source. Lake Ontario, Ganaraska River CC; EC

FISHES; ENVIRONMENTAL EXPOSURE; BIOCONCENTRATION; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WATER POLLUTION; POLYCHLORINATED BIPHENYLS
Oliver, B.G.; Niimi, A.J. 1985 Environmental Science and Technology 19:842-849

Benzeneacetic acid, 4-chloro-alpha-(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester
51630-58-1
C25-H22-Cl-N-O3
MW 419.93

Beetle, ground
CARABIDAE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6401 Body		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given	a) 0.12+/-0.03 ppm b) Not detected c) Not detected d) 0.14+/-0.04 ppm e) Not detected f) 0.02+/-0.01 ppm g) 0.03+/-0.00 ppm h) 0.13+/-0.04 ppm i) 0.06+/-0.03 ppm j) 0.11+/-0.09 ppm k) 0.15+/-0.14 ppm S.E. Wet wt	a) Pydrin applied at 0.112 kg AI/ha to three 1-ha old-field test plots on 6/9/80. Sampled 10 d after spraying b) Sampled d 17 c) Sampled d 22 d) Sprayed again 8/5/80, sampled 6 d after 2nd spraying e) Sampled d 17 f) Sprayed 6/10/81 and 7/21/81. Sampled 1 d before 2nd spraying g) Sampled d 2 after 2nd spraying h) Sampled d 4 i) Sampled d 8 j) Sampled d 16 k) Sampled d 24 Levels in controls were not detected in 1980 and ranged from not detected to 0.10 ppm wet wt in 1981. Detection limit 0.01 ppm wet wt. Iowa GLC; EC

INSECTICIDES; PESTICIDE RESIDUES; TERRESTRIAL; INSECTS; MAMMALS; VOLES; MICE; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; BODY; IOWA; LAND POLLUTION; BIOLOGICAL MONITORING; PESTICIDES
Bennett, R.S.; Klaas, E.E.; Coats, J.R.; Kolbe, E.J. 1986 Bulletin of Environmental Contamination and Toxicology 36:785-792

Benzeneacetic acid, 4-chloro-alpha-(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester
51630-58-1
C25-H22-Cl-N-O3
MW 419.93
Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6402 Adipose	18 Ingestion	0.05-0.07 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.15 ppm, d 5. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
6403 Blood	18 Ingestion	4.70-0.05 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, on d 1, followed by sharp decrease. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
6404 Brain	18 Ingestion	1.5-3.5 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 3.9 ppm, d 7. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
6405 Eggs	30 Ingestion	a) 0.02-0.06 ppm b) 0.05-<0.01 ppm Ranges of means	a) Not given b) Not given	a) Egg yolk. Peak, 0.32 ppm, d 4 b) Egg white. Peak, 0.23 ppm, d 4 Day 1 and d 10 after single dose to hens of mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Eggs collected daily from white leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
6406 Heart	18 Ingestion	0.50-0.30 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 1.00 ppm, d 3. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
6407 Kidney	18 Ingestion	0.95-0.24 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 1.0 ppm, d 7. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
6408 Liver	18 Ingestion	0.03-0.01 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.18 ppm, d 3. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC

(next page)

Benzeneacetic acid, 4-chloro-alpha-(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester
51630-58-1
C25-H22-Cl-N-O3
MW 419.93

Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6409 Ovary	18 Ingestion	0.95-0.20 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.95 ppm, d 1 and d 5. White leghorns, wt 1.45-1.68 kg. Estimated from graph. *Egypt* GC-EC
6410 Skin	18 Ingestion	0.06-0.06 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.19 ppm, d 5. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC

PESTICIDE RESIDUES; PESTICIDES; CHICKENS; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; AGRICULTURE; ADIPOSE TISSUE; BLOOD; BRAIN; KIDNEYS; LIVER; OVARIES; HEART; SKIN; EGGS; EGYPT

Saleh, M.A.; Ibrahim, N.A.; Soliman, N.Z.; El Sheimy, M.K. 1986 Journal of Agricultural and Food Chemistry 34:895-898

Grasshopper, short-horned
ACRIDIDAE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6411 Body		a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.03+/-0.01 ppm b) Not detected c) 0.33+/-0.08 ppm d) 0.19+/-0.05 ppm e) 0.12+/-0.03 ppm S.E. Wet wt	a) Pydrin applied at 0.112 kg AI/ha to three 1-ha old-field test plots on 6/9/80. Sampled 36 d after spraying b) Sampled 49 d after spraying c) Applied again 8/5/80, sampled 7 d after spraying d) Sampled 14 d after 2nd spraying, e) Sampled 21 d after 2nd spraying Detection limit 0.01 ppm wet wt. Not detected in composite samples from 3 unsprayed control plots. Iowa GLC; EC

INSECTICIDES; PESTICIDE RESIDUES; TERRESTRIAL; INSECTS; MAMMALS; VOLES; MICE; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; BODY; IOWA; LAND POLLUTION; BIOLOGICAL MONITORING; PESTICIDES

Bennett, R.S.; Klaas, E.E.; Coats, J.R.; Kolbe, E.J. 1986 Bulletin of Environmental Contamination and Toxicology 36:785-792

Benzeneacetic acid, 4-chloro-alpha-(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester
51630-58-1
C25-H22-Cl-N-O3
MW 419.93

Minnow, fathead
PIMEPHALES PROMELAS

Tissue	Cases Exposure Route	Range	Mean	General Information
6412 Body	a) 4 b) 4 c) 4 d) 4 e) 4 f) 4 g) 4 h) 3 i) 4 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 598+/-124 ng/g b) 911+/-147 ng/g c) 1220+/-122 ng/g d) 1050+/-79 ng/g e) 1010+/-109 ng/g f) 887+/-76 ng/g g) 1300+/-99 ng/g h) 1170+/-64 ng/g i) 1030+/-89 ng/g Wet wt	a) Technical-grade, 0.37+/-0.13 ug/l, survivors b) 0.49+/-0.12 ug/l, survivors c) 0.75+/-0.11 ug/l, dead fish d) 1.33+/-0.10 ug/l, dead fish e) 3.51+/-0.41 ug/l, dead fish f) 30% emulsifiable concentrate, 0.58+/-0.03 ug/l, survivors g) 0.92+/-0.05 ug/l, dead fish h) 1.49+/-0.13 ug/l, dead fish i) 3.22+/-0.14 ug/g, dead fish Chemical formulations and doses. Mean LC50 (ug/L) ranged from 0.69 (96 hr) to 1.14 (24 hr) for the technical grade and 0.75 (168 hr) to 2.06 (24 hr) for the concentrate. Minnesota

BODY; DELIBERATE EXPOSURE; FISHES; AQUATIC; MINNESOTA; INSECTICIDES; ACCIDENTAL POISONING; BIOACCUMULATION; WATER POLLUTION; SURFACTANTS

Bradbury, S.P.; Coats, J.R.; McKim, J.M. 1985 *Environmental Toxicology and Chemistry* 4:533-541

Mouse, deer
PEROMYSCUS MANICULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6413 Body	a) 3 b) 2 c) 3 d) 3 e) 1 f) 1 g) 1 h) 1	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.10+/-0.10 ppm b) 0.09 ppm c) 0.01+/-0.01 ppm d) 0.01+/-0.00 ppm e) Not available f) 0.17 ppm g) 0.04 ppm h) 0.01 ppm S.E. Wet wt	a) Collected from 3 sprayed plots 2 d after second application on 7/21/81 b) Sprayed plots, d 4 c) Sprayed plots, d 8 d) Sprayed plots, d 21 e) Collected from one control plot, d 2 (sample lost) f) Control, d 4 g) Control, d 8 h) Control, d 21 Pydrin sprayed at a rate of 0.112 kg AI/ha. Samples collected in 1980 from the same 1-ha old-field sites, both sprayed and control, had no detectable levels. Detection limit 0.01 ppm wet wt. Analyzed samples did not include skin or gastrointestinal tract. Iowa GLC; EC

INSECTICIDES; PESTICIDE RESIDUES; TERRESTRIAL; INSECTS; MAMMALS; VOLES; MICE; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; BODY; IOWA; LAND POLLUTION; BIOLOGICAL MONITORING; PESTICIDES

Bennett, R.S.; Klaas, E.E.; Coats, J.R.; Kolbe, E.J. 1986 *Bulletin of Environmental Contamination and Toxicology* 36:785-792

Benzeneacetic acid, 4-chloro-alpha-(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester
51630-58-1
C25-H22-Cl-N-O3
MW 419.93

Quail, bobwhite
COLINUS VIRGINIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6414 Brain	a) 2 b) 3 c) 6 d) 7	a) Not given b) Not given c) Not given d) Not given	a) 0.10+/-0.01 ppm b) 0.28+/-0.18 ppm c) 1.09+/-0.92 ppm d) 1.26+/-0.52 ppm Wet wt	a) Dose 500 mg/kg b) 1000 mg/kg c) 2000 mg/kg d) 4000 mg/kg Levels in immature birds, died during 14-day observation period following 5-day exposure. Hyperactivity, irregular leg movement, ataxia, muscle spasms, sternal recumbency, death GC-EC
6415 Liver	a) 2 b) 3 c) 6 d) 7	a) Not given b) Not given c) Not given d) Not given	a) 0.53+/-0.67 ppm b) 0.76+/-0.22 ppm c) 0.75+/-0.20 ppm d) 0.78+/-0.20 ppm Wet wt	a) Dose 500 mg/kg b) 1000 mg/kg c) 2000 mg/kg d) 4000 mg/kg Levels in immature birds, died during 14-day observation period following 5-day exposure. Iowa, Maquoketa, San Prairie Quail Farm Hyperactivity, irregular leg movement, ataxia, muscle spasms, sternal recumbency, death GC-EC
DELIBERATE EXPOSURE; BIRDS; LIVER; BRAIN; FOOD CONTAMINATION; PESTICIDES; TERRESTRIAL Bradbury, S.P.; Coats, J.R. 1982 Journal of Toxicology and Environmental Health 10:307-319				

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
6416 Adipose	4	Not given	203+/-47 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6417 Bile	4	Not given	7,060+/-4,910 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6418 Blood	2	a) Not given b) Not given c) Not given	a) 22+/-7 pg/g b) 8+/-2 pg/g c) 46+/-12 pg/g	a) Whole blood b) Plasma c) Red blood cells Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting

(next page)

Benzeneacetic acid, 4-chloro-alpha-(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester
51630-58-1
C25-H22-Cl-N-O3
MW 419.93

Trout, rainbow
SALMO GAIRDNERI

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6419 Brain	4	Not given	21+/-11 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6420 Carcass	2	Not given	23+/-4 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Carcass excludes brain, heart, kidney, liver, ovaries, spleen, testes, and samples of fat (0.1-0.7 g), gill (1.5-2.5 g), and muscle (3.5-5.5 g). Scintillation counting
6421 Gills	4	Not given	46+/-22 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6422 Heart	4	13-21 pg/g	17 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6423 Kidney	4	Not given	44+/-10 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6424 Liver	4	Not given	49+/-7 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6425 Muscle	4	Not given	27+/-4 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6426 Ovary	2	25-30 pg/g	27 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting
6427 Spleen	4	Not given	34+/-9 pg/g	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Scintillation counting

Benzeneacetic acid, 4-chloro-alpha-(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester

51630-58-1
C25-H22-Cl-N-O3
MW 419.93

6428 Testis	2	Not detected	Not detected	Fish (wt 0.640-0.971 kg) exposed in unfiltered Lake Superior water to [3-H]-labelled insecticide (0.28 ng/L) for 46-47 hr followed by 48 hr depuration. Measured as [3-H]-fenvalerate equivalents. Detection limit 10 pg/g. Scintillation counting

FISHES; AQUATIC; METABOLISM; DELIBERATE EXPOSURE; PESTICIDE RESIDUES; PESTICIDES; INSECTICIDES; BILE; BRAIN; BLOOD; CARCASS; ADIPOSE TISSUE; GILLS; HEART; KIDNEYS; LIVER; MUSCLES; OVARIES; TESTES; SPLEEN

Bradbury, S.P.; Coats, J.R.; McKim, J.M. 1986 Environmental Toxicology and Chemistry 5:567-576

Vole, meadow
MICROTUS PENNSYLVANICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6429 Body	a) 3 b) 3 c) 3 d) 3 e) 1 f) 1 g) 1	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.07+/-0.02 ppm b) 0.12+/-0.02 ppm c) 0.46+/-0.27 ppm d) 0.04+/-0.03 ppm e) Not detected f) 0.09 ppm g) 0.02 ppm S.E. Wet wt	a) Collected from 3 sprayed plots 2 d after second application on 7/21/81 b) Sprayed plots, d 4 c) Sprayed plots, d 8 d) Sprayed plots, d 21 e) Collected from one control plot, d 2 (sample lost) f) Control, d 4 g) Control, d 8 Pydrin sprayed at a rate of 0.112 kg AI/ha. Samples collected in 1980 from the same 1-ha old-field sites, both sprayed and control, had no detectable levels. Detection limit 0.01 ppm wet wt. Analyzed samples did not include skin or gastrointestinal tract. Iowa GLC; EC

INSECTICIDES; PESTICIDE RESIDUES; TERRESTRIAL; INSECTS; MAMMALS; VOLES; MICE; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; BODY; IOWA; LAND POLLUTION; BIOLOGICAL MONITORING; PESTICIDES

Bennett, R.S.; Klaas, E.E.; Coats, J.R.; Kolbe, E.J. 1986 Bulletin of Environmental Contamination and Toxicology 36:785-792

Benzenesulfonic acid, p-chlorophenyl ester (8 CI); Benzenesulfonic acid, 4-chlorophenyl ester (9 CI)

80-38-6
C12-H9-Cl-O3-S
MW 268.72, MP 62 C

Fish (Mugil)
MUGIL sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6430 Muscle	a) 27 b) 18	a) Not given b) Not given	a) 383 ng/g b) 570 ng/g Wet wt	a) From dead individuals found in 11/84 on wet area of agricultural region with recent red-mite infestation/treatment b) From collection of live individuals Spain, Castellon Province GC

(next page)

Benzenesulfonic acid, p-chlorophenyl ester (8 CI); Benzenesulfonic acid, 4-chlorophenyl ester (9 CI)
80-38-6
C12-H9-Cl-O3-S
MW 268.72, MP 62 C

Fish (Mugil)
MUGIL sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6431 Viscera	a) 27 b) 18	a) Not given b) Not given	a) 1057 ng/g b) 254 ng/g Wet wt	a) From dead individuals found in 11/84 on wet area of agricultural region with recent red-mite infestation/treatment b) From collection of live individuals Spain, Castellon Province GC

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; WATER POLLUTION; VISCERA; MUSCLES; SPAIN; MEDITERRANEAN SEA; PESTICIDES; ORGANOPHOSPHATES
Barbera, J.C.; Lopez, F.J.; Hernandez, F.; Medina, J.; Pastor, A. 1986 Bulletin of Environmental Contamination and Toxicology 36:211-218

Benzhydrol, 4,4'-dichloro-alpha-(trichloromethyl)- (8 CI); Benzenemethanol, 4-chloro-alpha-(4-chlorophenyl)-alpha-(trichloromethyl)- (9 CI)
115-32-2
C14-H9-Cl5-O
MW 370.47, MP 78.5-79.5 C, BP 77-78 C

Fish (Mugil)
MUGIL sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6432 Muscle	a) 27 b) 18	a) Not given b) Not given	a) 869 ng/g b) 1201 ng/g Wet wt	a) From dead individuals found in 11/84 on wet area of agricultural region with recent red-mite infestation/treatment b) From collection of live individuals Spain, Castellon Province GC
6433 Viscera	a) 27 b) 18	a) Not given b) Not given	a) 3938 ng/g b) 1263 ng/g Wet wt	a) From dead individuals found in 11/84 on wet area of agricultural region with recent red-mite infestation/treatment b) From collection of live individuals Spain, Castellon Province GC

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; WATER POLLUTION; VISCERA; MUSCLES; SPAIN; MEDITERRANEAN SEA; PESTICIDES; ORGANOPHOSPHATES
Barbera, J.C.; Lopez, F.J.; Hernandez, F.; Medina, J.; Pastor, A. 1986 Bulletin of Environmental Contamination and Toxicology 36:211-218

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Amphipod

Tissue	Cases Exposure Route	Range	Mean	General Information
6434 Body, whole	168	a) Not applicable b) Not applicable	a) 4900+/-50 pmol b) 2400+/-110 pmol BaP equiv/g Wet wt	a) EOHAUSTORIUS WASHINGTONIANUS b) RHEPOXYNIUS ABRONIUS Estimates based on specific activity after solvent extraction. Exposure was for 1 wk to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). % in tissue as BaP 78+/-3 and 26+/-4, % metabolites 22+/-3 and 74+/-4, respectively. Washington, Puget Sound GC

DELIBERATE EXPOSURE; AQUATIC; BODY; AMPHIPODS; CLAMS; SHRIMP; FISHES; AROMATIC HYDROCARBONS; BENZOPYRENE; SEDIMENTS; WATER POLLUTION; METABOLITES

Varanasi, U.; Reichert, W.L.; Stein, J.E.; Brown, D.W.; Sanborn, H.R. 1985 Environmental Science and Technology 19(9):836-841

Clam
TRIDACNA MAXIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
6435 Body		a) <0.004-0.02 ug/g b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) <0.003-0.01 ug/g h) Not applicable i) Not applicable j) <0.004-<0.004 ug/g	a) Not given b) <0.009 ug/g c) <0.009 ug/g d) <0.02 ug/g e) <0.005 ug/g f) <0.005 ug/g g) Not given h) <0.004 ug/g i) <0.005 ug/g j) <0.004 ug/g	a) Heron Island, 7 sites b) Polmaise Reef, 1 site c) Masthead Island, 1 site d) Wistari Reef e) One Trec Island, 1 site f) Wreck Island, 1 site g) Lizard Island, 4 sites h) Carter Reef, 1 site i) Flinder's Reef, 1 site j) Orpheus Island, 3 sites Collections in Great Barrier Reef. Levels are lowest reported in the world. Detection limit <0.01 mg/kg wet wt. Australia, Great Barrier Reef Fluorimetry

BODY; CLAMS; AQUATIC; ENVIRONMENTAL EXPOSURE; AUSTRALIA; POLYCYCLIC AROMATIC HYDROCARBONS; WATER POLLUTION; LAND POLLUTION; BIOACCUMULATION; ANIMAL POPULATIONS

Smith, J.D.; Bagg, J.; Bycroft, B.M. 1985 Environmental Science and Technology 18(5):353-358

Tissue	Cases Exposure Route	Range	Mean	General Information
6436 Body	a) 5 b) 5	a) Not applicable b) Not applicable	a) 430+/-120 pmol b) 950+/-270 pmol BaP eqiv/g Wet wt	a) Exposed 1 wk b) Exposed 4 wk Estimates based on specific activity after solvent extraction. Exposure was to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). % in tissue as BaP >95, as metabolites <5. Washington, Puget Sound GC

(next page)

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Clam
TRIDACNA MAXIMA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6437 Hepatopancreas	a) 5 b) 5	a) Not applicable b) Not applicable	a) 2600+/-1200 pmol b) 4800+/-1700 pmol BaP equiv/g Wet wt	a) Exposed 1 wk b) Exposed 4 wk Estimates based on specific activity after solvent extraction. Exposure was to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). % in tissue as BaP >95, as metabolites <5. Washington, Puget Sound GC
DELIBERATE EXPOSURE; AQUATIC; BODY; AMPHIPODS; CLAMS; SHRIMP; FISHES; AROMATIC HYDROCARBONS; BENZOPYRENE; SEDIMENTS; WATER POLLUTION; METABOLITES Varanasi, U.; Reichert, W.L.; Stein, J.E.; Brown, D.W.; Sanborn, H.R. 1985 Environmental Science and Technology 19(9):836-841				

Clam, short-necked
VENERUPIS JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6438 Body		0.41-1.79 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Corb-shell

Tissue	Cases Exposure Route	Range	Mean	General Information
6439 Body		Not given	0.21 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Lobster, spiny
PANULIRUS ARGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6440 Body, whole	Injection	a) 70-10% b) 60-0.7% % of dose	a) Not given b) Not given	a) 1-7 wk, water temp 13.5-16.5 deg C b) 0.5-6 wk, water temp 26.5-29.0 deg C After 1 mg/kg intracardial injection. Ranges of means (3-4 animals/point) estimated from graph. Florida, south HPLC; Scintillation counting; Catalytic oxidation
6441 Carapace	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 30.9+/-4.2 b) 35.1+/-11.5 c) 20.4+/-13.1 d) 16.7+/-6.6 e) 1.31+/-0.98 f) 0.87+/-0.55 g) 16.6+/-11.0 h) 4.3+/-3.0 i) 6.1+/-1.5 j) 0.5+/-0.1 k) 0.4+/-0.1 l) 0.14+/-0.05 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Dorsal carapace. Florida, south HPLC; Scintillation counting; Catalytic oxidation
6442 Gills	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 19.2+/-2.4 b) 21.2+/-2.9 c) 16.3+/-7.3 d) 6.0+/-2.7 e) 0.89+/-0.47 f) 1.1+/-0.8 g) 33.0+/-2.5 h) 18.2+/-16.9 i) 7.7+/-3.5 j) 0.9+/-0.1 k) 0.5+/-0.2 l) 0.45+/-0.16 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation

(next page)

Benzo(a)pyrene

50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6443 Gonads	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 68.1+/-11.1 b) 53.4+/-12.7 c) 50.2+/-25.6 d) 9.6+/-6.5 e) 1.5+/-1.1 f) 0.44+/-0.16 g) 101.2+/-10.5 h) 33.2+/-15.7 i) 19.9+/-22.8 j) 1.8+/-0.9 k) 0.4+/-0.1 l) 0.21+/-0.09 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation
6444 Green gland	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 72.5+/-12.5 b) 99.9+/-13.5 c) 164.8+/-74.7 d) 65.6+/-13.2 e) 18.1+/-3.7 f) 4.4+/-3.5 g) 154.1+/-96.8 h) 185.5+/-67.2 i) 62.4+/-27.7 j) 8.5+/-1.9 k) 1.3+/-0.6 l) 0.56+/-0.32 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation
6445 Heart	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 546.3+/-510.8 b) 31.5+/-8.1 c) 8.1+/-3.1 d) 2.08+/-0.90 e) 5.2+/-1.9 f) 0.33 g) 0.23+/-0.09 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 1 wk d) 4 wk e) 3 d, water temp 26.5-29 deg C f) 4 wk g) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation

(next page)

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6446 Hemolymph	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 *Injection*	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 9.0+/-1.6 b) 7.0+/-1.7 c) 1.9+/-0.5 d) 1.1+/-0.1 e) 0.50+/-0.58 f) 0.40+/-0.29 g) 5.7+/-1.8 h) 3.0+/-0.6 i) 1.2+/-0.8 j) 0.20+/-0.01 k) 0.05+/-0.03 l) 0.09+/-0.01 *100 pmol eq/ml*	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk *After 1 mg/kg into pericardial sinus.* Florida, south HPLC; Scintillation counting; Catalytic oxidation
6447 Hepatopancreas	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 72.6+/-17.5 b) 208.1+/-7.6 c) 377.0+/-175.2 d) 409.7+/-99.8 e) 276.3+/-97.6 f) 78.2+/-46.9 g) 262.1+/-75.1 h) 350.6+/-174.5 i) 554.6+/-53.3 j) 193.9+/-50.3 k) 19.3+/-8.5 l) 6.10+/-2.90 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation

(next page)

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6448 Intestine	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 78.0+/-11.0 b) 69.5+/-9.7 c) 45.0+/-17.3 d) 96.0+/-47.2 e) 27.0+/-3.7 f) 21.4+/-30.7 g) 130.9+/-25.1 h) 59.2+/-6.3 i) 24.0+/-6.2 j) 20.7+/-2.7 k) 3.6+/-0.8 l) 2.62+/-1.57 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation
6449 Muscle	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 18.3+/-4.1 b) 20.1+/-3.0 c) 8.0+/-1.0 d) 6.3+/-2.8 e) 1.1+/-0.5 f) 0.52+/-0.03 g) 26.5+/-10.0 h) 9.1+/-2.7 i) 3.6+/-1.9 j) 1.0+/-0.3 k) 0.22+/-0.18 l) 0.08+/-0.01 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation

(next page)

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Lobster, spiny
PANULIRUS ARGUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6450 Stomach	a) 3 b) 3 c) 3 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 76.2+/-21.8 b) 101.6+/-20.1 c) 68.9+/-53.2 d) 143.5+/-45.9 e) 36.2+/-1.7 f) 34.7+/-25.2 g) 95.6+/-24.5 h) 133.1+/-65.1 i) 147.8+/-60.7 j) 28.6+/-2.9 k) 5.3+/-3.0 l) 2.31+/-1.33 100 pmol eq/g	a) 6 hr, water temp 13.5-16.5 deg C b) 1 d c) 3 d d) 1 wk e) 4 wk f) 7 wk g) 6 hr, water temp 26.5-29 deg C h) 1 d i) 3 d j) 1 wk k) 4 wk l) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation
6451 Urine	a) 3 b) 3 c) 4 d) 4 e) 3 f) 3 g) 3 h) 3 i) 3 j) 3 k) 3 l) 3 Injection	a) Not given b) Not given c) 0.5-1.8 d) 24.4-135.3 e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given 100 pmol eq/ml	a) 38.2+/-18.3 b) 8.2+/-2.9 c) Not given d) Not given e) 3.8 f) 3.1+/-0.7 g) 15.3+/-9.1 h) 0.9+/-0.6 i) 0.2+/-0.1 j) 0.0U+/-0.03 k) 0.02+/-0.01 100 pmol eq/ml	a) 1 d, water temp 13.5-16.5 deg C b) 3 d c) 1 wk d) 4 wk e) 7 wk f) 6 hr, water temp 26.5-29 deg C g) 1 d h) 3 d i) 1 wk j) 4 wk k) 6 wk After 1 mg/kg into pericardial sinus. Florida, south HPLC; Scintillation counting; Catalytic oxidation
CRUSTACEANS; BODY; HEPATOPANCREAS; GREEN GLAND; URINE; GONADS; GILLS; STOMACH; INTESTINES; HEMOLYMPH; MUSCLES; CARAPACE; HEART; AQUATIC; DELIBERATE EXPOSURE; FLORIDA; COMPARATIVE EVALUATIONS; POLYCYCLIC AROMATIC HYDROCARBONS; METABOLISM Little, P.J.; James, M.O.; Pritchard, J.B.; Bend, J.R. 1985 Toxicology and Applied Pharmacology 77:325-333				

Mussel

Tissue	Cases Exposure Route	Range	Mean	General Information
6452 Body		0.40-2.64 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Benzo(a)pyrene

50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Mussel

Tissue	Cases Exposure Route	Range	Mean	General Information
6453 Body	a) 29 b) 1	a) Not given b) Not given	a) 2 ppb b) 2 ppb Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC

ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN

Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6454 Body		a) Not detected-5 ug/kg b) Not detected-3 ug/kg Wet wt	a) Not given b) Not given	a) Collections from 4 sites, 10/9 and 10/12/78 b) From 3 sites, 5/9, 5/23, 6/5/79 Detection limit 0.5 ug/kg. Composite samples of at least 10 individuals analyzed. Finland, Archipelago Sea GLC/MS

ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION

Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343

Oyster

Tissue	Cases Exposure Route	Range	Mean	General Information
6455 Body		Not given	0.78 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC

ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS

Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6456 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0 ug/g b) 0 ug/g c) 0 ug/g d) 0.2 ug/g e) 0 ug/g f) 0 ug/g Dry wt	a) Wreck Shoals, James River b) Deepwater Shoals, James River c) White Shoals, James River d) Hospital Point, Elizabeth River e) Piankatank River oysters relocated for 6 d at Hospital Point, Elizabeth River f) Piankatank River oysters relocated for 6 d at S217, Elizabeth River Collection sites. Levels generally correspond with degree of industrial and urban development and shipping traffic in habitats. Minimum detection limit of PAH's 0.1-0.2 ug/g dry wt. Virginia GC

BODY; OYSTERS; AQUATIC; ENVIRONMENTAL EXPOSURE; VIRGINIA; POLYCYCLIC AROMATIC HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION; INDUSTRIAL PLANTS; INDUSTRIAL POLLUTION; INDUSTRIES

Pittinger, C.A.; Buikema, A.L.; Hornor, S.G.; Young, R.W. 1985 Environmental Toxicology and Chemistry 4:379-387

Tissue	Cases Exposure Route	Range	Mean	General Information
6457 Body		a) Not detectable b) Not detectable-0.5+/-0.9 ug/kg c) Not detectable d) 1.0+/-1.7-1.6+/-2.8 ug/kg	a) Not given b) Not given c) Not given d) Not given	a) Palmetto Bay Marina, 10 sites, spring b) Summer c) Outdoor Resorts Marina, 8 sites, spring d) Summer Pooled, 15 adults/sample, collected weekly from mid-intertidal areas of reefs in different sites at each marina. 3/29-4/14/83 and 7/26-8/11/83. For each group, n=3. Ranges of means. Detection limit 1.3 ug/kg. South Carolina, Beaufort County HPLC

AQUATIC; ENVIRONMENTAL EXPOSURE; MOLLUSKS; SOUTH CAROLINA; WATER POLLUTION; FOOD CONTAMINATION; BENZOPYRENE; POLYCYCLIC AROMATIC HYDROCARBONS

Marcus, J.M.; Stokes, T.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:835-844

Benzo(a)pyrene

50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6458 Digestive diverticulum	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.2 ng/mg b) 0.4 ng/mg c) 0.15 ng/mg d) 0.55 ng/mg e) 0.5 ng/mg f) 0.75 ng/mg Dry wt	a) After 15 hr exposure to 1.3 ng/ml adsorbed on particles b) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene c) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene d) After 15 hr exposure to 1 ng/ml dissolved in the water e) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene f) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene Estimated from graph. Scintillation counting
6459 Gills	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.45 ng/mg b) 0.60 ng/mg c) 0.55 ng/mg d) 1.25 ng/mg e) 1.20 ng/mg f) 1.15 ng/mg Dry wt	a) After 15 hr exposure to 1.3 ng/ml adsorbed on particles b) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene c) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene d) After 15 hr exposure to 1 ng/ml dissolved in the water e) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene f) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene Estimated from graph. Scintillation counting
6460 Labial palps	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.2 ng/mg b) 0.3 ng/mg c) 0.15 ng/mg d) 0.45 ng/mg e) 0.3 ng/mg f) 0.5 ng/mg Dry wt	a) After 15 hr exposure to 1.3 ng/ml adsorbed on particles b) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene c) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene d) After 15 hr exposure to 1 ng/ml dissolved in the water e) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene f) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene Estimated from graph. Scintillation counting
6461 Mantle	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.2 ng/mg b) 0.3 ng/mg c) 0.15 ng/mg d) 0.55 ng/mg e) 0.75 ng/mg f) 0.50 ng/mg Dry wt	a) After 15 hr exposure to 1.3 ng/ml adsorbed on particles b) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene c) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene d) After 15 hr exposure to 1 ng/ml dissolved in the water e) Same, plus 12 ng/ml [C-14]-PCB and 83.3 ng/ml naphthalene f) Same, plus 10 ng/ml PCB and 20.5 ng/ml [C-14]-naphthalene Estimated from graph. Scintillation counting

GILLS; MANTLE; LABIAL PALPS; DIGESTIVE DIVERTICULA; DELIBERATE EXPOSURE; SHELLFISH; AQUATIC; POLYCHLORINATED BIPHENYLS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION

Fortner, A.R.; Sick, L.V. 1985 Bulletin of Environmental Contamination and Toxicology 34:256-264

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Shrimp
PANDALUS PLATYCEROS

Tissue	Cases Exposure Route	Range	Mean	General Information
6462 Body	a) 3 b) 3	a) Not applicable b) Not applicable	a) 13+/-4 pmol b) 41+/-13 pmol BaP equiv/g Wet wt	a) Exposed 1 wk b) Exposed 4 wk Estimates based on specific activity after solvent extraction. Exposure was to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). Washington, Puget Sound GC
6463 Hepatopancreas	a) 3 b) 3	a) Not applicable b) Not applicable	a) 600+/-310 pmol b) 400+/-95 pmol BaP equiv/g Wet wt	a) Exposed 1 wk b) Exposed 4 wk Estimates based on specific activity after solvent extraction. Exposure was to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). % in tissue as BaP 6+/-2, as metabolites 94+/-2. Washington, Puget Sound GC
DELIBERATE EXPOSURE; AQUATIC; BODY; AMPHIPODS; CLAMS; SHRIMP; FISHES; AROMATIC HYDROCARBONS; BENZOPYRENE; SEDIMENTS; WATER POLLUTION; METABOLITES Varanasi, U.; Reichert, W.L.; Stein, J.E.; Brown, D.W.; Sanborn, H.R. 1985 Environmental Science and Technology 19(9):836-841				

Sole, English
PAROPHRYS VETULUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6464 Bile		a) Not applicable b) Not applicable	a) 14000+/-7900 pmol b) 14000+/-13000 pmol BaP equiv/g Wet wt	a) Exposed 1 wk b) Exposed 4 wk Estimates based on specific activity after solvent extraction. Exposure was to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). % in tissue as BaP <1 as metabolites >99. Washington, Puget Sound GC
6465 Body		a) Not applicable b) Not applicable	a) 36+/-6 pmol b) 35+/-5 pmol BaP equiv/g Wet wt	a) Exposed 1 wk b) Exposed 4 wk Estimates based on specific activity after solvent extraction. Exposure was to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). % in tissue as BaP 6+/-1, as metabolites 94+/-1. n=3-8. Minus gallbladder, g.i. tract. Washington, Puget Sound GC

(next page)

Benzo(a)pyrene
50-32-8
C20-H12
MW 252.3, MP 179 C, BP 372 C at 10 mm Hg

Sole, English
PAROPHRYS VETULUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6466 Liver		a) Not applicable b) Not applicable	a) 890+/-170 pmol b) 960+/-270 pmol BaP equiv/g Wet wt	a) Exposed 1 wk b) Exposed 4 wk Estimates based on specific activity after solvent extraction. Exposure was to Duwamish River Delta sediment (containing 1160+/-110 ng/g, wet wt). % in tissue as BaP 1.0+/-0.3, as metabolites 99+/-0.3. n=3-8. Washington, Puget Sound GC
DELIBERATE EXPOSURE; AQUATIC; BODY; AMPHIPODS; CLAMS; SHRIMP; FISHES; AROMATIC HYDROCARBONS; BENZOPYRENE; SEDIMENTS; WATER POLLUTION; METABOLITES				
Varanasi, U.; Reichert, W.L.; Stein, J.E.; Brown, D.W.; Sanborn, H.R. 1985 Environmental Science and Technology 19(9):836-841				

Sunfish, Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6467 Body	a) 60 b) 60 Ingestion	a) 200-1040 pmol/g b) 40-180 pmol/g Wet wt	a) Not applicable b) Not applicable	a) 1-140 hr, peak (1480 pmol/g) 48 hr after 4 pmol/ml from 0-48 hr b) 1-40 hr, peak (220 pmol/g) 48 hr after 4 pmol/ml and 20 mg C/l dissolved humic material (DHM) 0-48 hr, only DHM thereafter. 97% bound to DHM Estimated from graph. Georgia, Cohutta HPLC
BODY; FISHES; AQUATIC; DELIBERATE EXPOSURE; TENNESSEE; POLYCYCLIC AROMATIC HYDROCARBONS; BIOACCUMULATION; BIOAVAILABILITY				
McCarthy, J.F.; Jimenez, B.D. 1985 Environmental Toxicology and Chemistry 4:511-521				

Benzo(ghi)perylene
191-24-2
C22-H12
MW 276.34, MP 277-279 C, BP greater than 500 C

Clam
TRIDACNA MAXIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
6468 Body		a) <0.05-0.3 ug/g b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) <0.05-0.2 ug/g h) Not applicable i) Not applicable j) <0.1-<0.1 ug/g	a) Not given b) <0.2 ug/g c) <0.2 ug/g d) <0.1 ug/g e) <0.2 ug/g f) <0.2 ug/g g) Not given h) <0.1 ug/g i) <0.1 ug/g j) <0.1 ug/g	a) Heron Island, 7 sites b) Polmaise Reef, 1 site c) Masthead Island, 1 site d) Wistari Reef e) One Tree Island, 1 site f) Wreck Island, 1 site g) Lizard Island, 4 sites h) Carter Reef, 1 site i) Flinder's Reef, 1 site j) Orpheus Island, 3 sites Collections in Great Barrier Reef. Levels are lowest reported in the world. Australia, Great Barrier Reef Fluorimetry
BODY; CLAMS; AQUATIC; ENVIRONMENTAL EXPOSURE; AUSTRALIA; POLYCYCLIC AROMATIC HYDROCARBONS; WATER POLLUTION; LAND POLLUTION; BIOACCUMULATION; ANIMAL POPULATIONS Smith, J.D.; Bagg, J.; Bycroft, B.M. 1985 Environmental Science and Technology 18(5):353-358				

Clam, short-necked
VENERUPIS JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6469 Body		0.53-1.89 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Corb-shell

Tissue	Cases Exposure Route	Range	Mean	General Information
6470 Body		Not given	0.95 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Benzo(ghi)perylene
191-24-2
C22-H12
MW 276.34, MP 277-279 C, BP greater than 500 C

Mussel

Tissue	Cases Exposure Route	Range	Mean	General Information
6471 Body		0.83-2.28 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Tissue	Cases Exposure Route	Range	Mean	General Information
6472 Body	a) 29 b) 28	a) Not given b) Not given	a) 5 ppb b) 4 ppb Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541				

Oyster

Tissue	Cases Exposure Route	Range	Mean	General Information
6473 Body		Not given	0.87 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Benzo(ghi)perylene

191-24-2
C22-H12
MW 276.34, MP 277-279 C, BP greater than 500 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6474 Body		a) Not detectable b) Not detectable-1.2+/-2.1 ug/kg	a) Not given b) Not given	a) Palmetto Bay Marina, 10 sites, spring b) Summer Pooled, 15 adults/sample collected weekly form mid-intertidal areas of reefs. 3/29-4/14/83 and 7/26-8/11/83. For each group n=3. Ranges of means. Detection limit 1.5 ug/kg. South Carolina, Beaufort County HPLC

AQUATIC; ENVIRONMENTAL EXPOSURE; MOLLUSKS; SOUTH CAROLINA; WATER POLLUTION; FOOD CONTAMINATION; BENZOPYRENE; POLYCYCLIC AROMATIC HYDROCARBONS

Marcus, J.M.; Stokes, T.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:835-844

Benzo(k)fluoranthene

207-08-09
C20-H12
MW 252.32, MP 217 C, BP 480 C at 760 mm Hg

Clam
TRIDACNA MAXIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
6475 Body		a) <0.002-0.02 ug/g b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) <0.002-0.01 ug/g h) Not applicable i) Not applicable j) <0.003-<0.003 ug/g	a) Not given b) <0.003 ug/g c) <0.003 ug/g d) <0.003 ug/g e) <0.003 ug/g f) <0.003 ug/g g) Not given h) <0.003 ug/g i) <0.003 ug/g j) <0.003 ug/g	a) Heron Island, 7 sites b) Polmaise Reef, 1 site c) Masthead Island, 1 site d) Wistari Reef e) One Trec Island, 1 site f) Wreck Island, 1 site g) Lizard Island, 4 sites h) Carter Reef, 1 site i) Flinder's Reef, 1 site j) Orpheus Island, 3 sites Collections in Great Barrier Reef. Levels are lowest reported in the world. Australia, Great Barrier Reef Fluorimetry

BODY; CLAMS; AQUATIC; ENVIRONMENTAL EXPOSURE; AUSTRALIA; POLYCYCLIC AROMATIC HYDROCARBONS; WATER POLLUTION; LAND POLLUTION; BIOACCUMULATION; ANIMAL POPULATIONS

Smith, J.D.; Bagg, J.; Bycroft, B.M. 1985 Environmental Science and Technology 18(5):353-358

Benzo(k)fluoranthene
207-08-09
C20-H12
MW 252.32, MP 217 C, BP 480 C at 760 mm Hg

Clam, short-necked
VENERUPIS JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6476 Body		0.29-0.80 ppb	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Corb-shell

Tissue	Cases Exposure Route	Range	Mean	General Information
6477 Body		Not given	0.38 ppm	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Mussel

Tissue	Cases Exposure Route	Range	Mean	General Information
6478 Body		0.32-1.16 ppm	Not given	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Benzo(k)fluoranthene
207-08-09
C20-H12
MW 252.32, MP 217 C, BP 480 C at 760 mm Hg

Oyster

Tissue	Cases Exposure Route	Range	Mean	General Information
6479 Body		Not given	1.21 ppb	Shellfish from unpolluted, non-industrialized area. Simplified procedure was considered useful for routine analyses and screening. Japan, Miyagi Prefecture LC

ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS
Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6480 Body		Not given	12 ppb Wet wt	Mean of 8 samples collected 5/80-6/80, Inner Harbor Navigation Canal at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS

ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS
McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569

Tissue	Cases Exposure Route	Range	Mean	General Information
6481 Body		a) Not detectable-0.1+/-0.2 ug/kg b) Not detectable-0.9+/-1.6 ug/kg c) Not detectable d) Not detectable-0.2+/-0.4 ug/kg	a) Not given b) Not given c) Not given d) Not given	a) Palmetto Bay Marina, 10 sites, spring b) Summer c) Outdoor Resorts Marina, 8 sites, spring d) Summer Pooled, 15 adults/sample, collected weekly from mid-intertidal areas of reefs in different sites at each marina. 3/29-4/14/83 and 7/26-8/11/83. For each group, n=3. Ranges of means. Detection limit 0.65 ug/kg. South Carolina, Beaufort County HPLC

AQUATIC; ENVIRONMENTAL EXPOSURE; MOLLUSKS; SOUTH CAROLINA; WATER POLLUTION; FOOD CONTAMINATION; BENZOPYRENE; POLYCYCLIC AROMATIC HYDROCARBONS
Marcus, J.M.; Stokes, T.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:835-844

Benzo(k,b)fluoranthenes (No postings in CHEMLINE).

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6482 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) 4.8-5.0 ug/g Dry wt	a) 0.7 ug/g b) 0 ug/g c) 0 ug/g d) 1.0 ug/g e) 1.2 ug/g f) Not given Dry wt	a) Wreck Shoals, James River b) Deepwater Shoals, James River c) White Shoals, James River d) Hospital Point, Elizabeth River e) Piankatank River oysters relocated for 6 d at Hospital Point, Elizabeth River f) Piankatank River oysters relocated for 6 d at S217, Elizabeth River Collection sites. Levels generally correspond with degree of industrial and urban development and shipping traffic in habitats. Minimum detection limit of PAH's 0.1-0.2 ug/g dry wt. Virginia GC
BODY; OYSTERS; AQUATIC; ENVIRONMENTAL EXPOSURE; VIRGINIA; POLYCYCLIC AROMATIC HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION; INDUSTRIAL PLANTS; INDUSTRIAL POLLUTION; INDUSTRIES Pittinger, C.A.; Buikema, A.L.; Hornor, S.G.; Young, R.W. 1985 Environmental Toxicology and Chemistry 4:379-387				

Benzo(rst)pentaphene

189-55-9
C24-H14
MW 302.4, MP 280 C, BP 275 C at 0.05 mm Hg

Mussel
MYTILUS GALLOPROVINCIALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6483 Body	a) 1 b) 1	a) Not given b) Not given	a) 8 ppb b) Trace Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541				

Benzophenone, 4,4'-dichloro- (8 CI); Methanone, bis(4-chlorophenyl)- (9 CI)
90-98-2
C13-H8-Cl2-O
MW 251.13, MP 147-148 C, BP 353 C at 757 mm Hg

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
6484 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES
Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Fish, black scabbard
APHANOPUS CARBO

Tissue	Cases Exposure Route	Range	Mean	General Information
6485 Liver	1	<0.1-1.0 mg/kg Lipid basis	Not given	Collected south of Madeira. Deep water (800-1200 m) habitat. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES
Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Fish, parrot
SPARISOMA (EUSCARUS) CRETENSE

Tissue	Cases Exposure Route	Range	Mean	General Information
6486 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected from local fish market in Porto Santo, East of Madeira. Surface water habitat. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES
Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Benzophenone, 4,4'-dichloro- (8 CI); Methanone, bis(4-chlorophenyl)- (9 CI)
90-98-2
C13-H8-Cl2-O
MW 251.13, MP 147-148 C, BP 353 C at 757 mm Hg

Fish, scorpion
SCORPAENA SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
6487 Liver	1	<0.1-1.0 mg/kg Lipid basis	Not given	Collected off Northern Coast of Sao Miguel, Azores. Surface water habitat. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES
Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6488 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES
Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Beryllium
7440-41-7
Be
AtW 9.01218, MP 1287 C, BP 2500 C, VP 1 mm Hg at 1520 C, 10 mm Hg at 1860 C

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6489 Body		a) Not given b) Not given	a) 0.083+/-0.046 ppm b) 0.38+/-0.07 ppm Dry wt	Samples collected from entrance of the Chef Menteur Pass Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS

MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS
Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158

Beryllium

7440-41-7
Be
AtW 9.01218, MP 1287 C, BP 2500 C, VP 1 mm Hg at 1520 C, 10 mm Hg at 1860 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6490 Body		Not given	0.051+/-0.47 ppm Dry wt	Samples collected from entrance of the Inner Harbor Navigation Canal at Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS
MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158				

BHC, total (No postings in CHEMLINE).

C6-H6-Cl6
MW 290.85

Barbel
CLARIAS GARIEPINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6491 Adipose	5	0.28-0.55 mg/kg	0.40 mg/kg	Fat extracted from muscle, liver and skin. Collections in 1978 from Olifants River (near Marble Hall, 200 km NE of Pretoria), Olifants River Dame (near Phalaborwa, 450 km NE of Pretoria), Letalea River (Hans Merensky Nature Reserve). South Africa GC
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; FISHES; PESTICIDES; PESTICIDE RESIDUES; ADIPOSE TISSUE; DDT; DDE; DIELDRIN; ENDOSULFAN; BENZENE HEXACHLORIDE; SOUTH AFRICA; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS Pick, F.E.; de Beer, P.R.; van Dyk, L.P. 1981 Chemosphere 10(11/12):1243-1251				

Buffalo
BUBALUS BUBALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6492 Adipose	17	0.039-0.485 ppm Wet wt	0.165+/-0.027 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
6493 Bone marrow	5	0.123-0.366 ppm Wet wt	0.252+/-0.52 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

(next page)

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85

Buffalo
BUBALUS BUBALIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6494 Brain	16	0.024-0.117 ppm Wet wt	0.076+/-0.006 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
6495 Liver	17	0.020-0.090 ppm Wet wt	0.038+/-0.004 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
6496 Muscle	22	0.006-0.029 ppm Wet wt	0.012+/-0.002 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 *Pesticides Monitoring Journal* 15(2):103-106				

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
6497 Muscle	2	Not given	1.189+/-0.277 ug/g fat	From samples with mean of 3.67% fat. 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85
Chicken
GALLUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6498 Adipose	3	0.121-0.310 ppm Wet wt	0.208 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
6499 Adipose	22	0.819-14.104 ppm Wet wt	3.879+/-0.580 ppm Wet wt S.E.	Collected from slaughterhouse in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

Tissue	Cases Exposure Route	Range	Mean	General Information
6500 Blood, plasma	3	0.006-0.010 ppm Wet wt	0.007 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6501 Brain	3	0.008-0.025 ppm Wet wt	0.014 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85
Chicken
GALLUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6502 Brain	19	0.108-0.230 ppm Wet wt	0.162+/-0.007 ppm Wet wt S.E.	Collected from slaughterhouse in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

Tissue	Cases Exposure Route	Range	Mean	General Information
6503 Heart	3	Not given	0.020 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6504 Kidney	3	Not given	0.025 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6505 Liver	3	Not given	0.025 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
6506 Liver	20	0.040-0.445 ppm Wet wt	0.195+/-0.018 ppm Wet wt S.E.	Collected from slaughterhouse in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85

Chicken
GALLUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6507 Lung	3	Not given	0.022 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6508 Muscle	3	Not given	0.30 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
6509 Muscle	10	0.014-0.243 ppm Wet wt	0.109+/-0.024 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

Tissue	Cases Exposure Route	Range	Mean	General Information
6510 Spleen	3	Not given	0.024 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

BHC, total (No postings in CHEMLINE).

C6-H6-Cl6
MW 290.85

Cormorant, white-breasted
PHALACROCORAX CARBO LUCIDUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6511 Adipose	a) 3 b) 1	a) 0.21-0.31 mg/kg b) Not applicable	a) 0.25 mg/kg b) 12.65 mg/kg	a) From Olifants River (near Marble Hall, 200 km NE of Pretoria), Letaba River (Hans Mevensky Nature Reserve), Lacot Dam (Letaba District) b) Found dead, Njelele Dame Collections in 1978. Fat extracted from muscle, liver, skin or samples from dead animals. South Africa GC
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; FISHES; PESTICIDES; PESTICIDE RESIDUES; ADIPOSE TISSUE; DDT; DDE; DIELDRIN; ENDOSULFAN; BENZENE HEXACHLORIDE; SOUTH AFRICA; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS Pick, F.E.; de Beer, P.R.; van Dyk, L.P. 1981 Chemosphere 10(11/12):1243-1251				

Crow, house
CORVUS SPLENDENS

Tissue	Cases Exposure Route	Range	Mean	General Information
6512 Adipose	3	15.532-29.726 ppm Wet wt	21.815 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6513 Blood, plasma	3	0.016-0.062 ppm Wet wt	0.030 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6514 Brain	3	0.213-0.266 ppm Wet wt	0.246 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6515 Heart	3	Not given	0.449 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6516 Kidney	3	Not given	0.286 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6517 Liver	3	Not given	0.307 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

(next page)

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85

Crow, house
CORVUS SPLENDENS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6518 Lung	3	Not given	0.262 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6519 Muscle	3	Not given	0.419 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6520 Spleen	3	Not given	0.211 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Dove, rock
COLUMBA LIVIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6521 Blood, plasma	3	0.045-0.053 ppm Wet wt	0.048 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6522 Brain	3	0.215-0.607 ppm Wet wt	0.316 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6523 Heart	3	Not given	0.321 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6524 Kidney	3	Not given	0.403 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

(next page)

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85

Dove, rock
COLUMBA LIVIA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6525 Liver	3	Not given	0.870 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6526 Lung	3	Not given	0.309 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6527 Muscle	3	Not given	0.342 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Egret, cattle
BUBULCUS IBIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6528 Adipose	3	5.623-7.239 ppm Wet wt	6.309 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6529 Blood, plasma	3	0.056-0.075 ppm Wet wt	0.004 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6530 Brain	3	0.032-0.175 ppm Wet wt	0.126 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6531 Heart	3	Not given	0.147 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

(next page)

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85

Egret, cattle
BUBULCUS IBIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6532 Kidney	3	Not given	0.210 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6533 Liver	3	Not given	0.226 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6534 Lung	3	Not given	0.167 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6535 Muscle	3	Not given	0.197 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Fish (A. vorax)
ASPIUS VORAX

Tissue	Cases Exposure Route	Range	Mean	General Information
6536 Muscle	2	Not given	2.956+/-1.798 ug/g fat	From samples with mean of 1.76% fat. 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85
Fish (B. belaweyi)
BARBUS BELAWEYI

Tissue	Cases Exposure Route	Range	Mean	General Information
6537 Muscle	4	Not given	1.553+/-1.214 ug/g fat	From samples with mean of 1.36% fat. 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

Fish (B. grypus)
BARBUS GRYPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6538 Muscle	11	a) Not given b) Not given	a) 1.005+/-0.476 ug/g b) 4.233+/-2.887 ug/g Fat basis	a) From samples with >2% fat (mean 3.03%), older animals b) <2% fat (mean 0.89%), younger animals 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

Fish (B. luteus)
BARBUS LUTEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6539 Muscle	6	a) Not given b) Not given	a) 1.231 ug/g b) 6.103+/-5.039 ug/g Fat basis	a) From samples with >2% fat (mean 2.10%), older animals b) <2% fat (mean 0.60%), younger animals 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85
Fish (B. xanthopterus)
BARBUS XANTHOPTERUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6540 Muscle	6	a) Not given b) Not given	a) 2.011+/-0.292 ug/g b) 2.644+/-1.284 ug/g Fat basis	a) From samples with >2% fat (mean 3.05%), older animals b) <2% fat (mean 1.44%), younger animals 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

Fish (C. regius)
CHONDROSTOMA REGIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6541 Muscle	19	a) Not given b) Not given	a) 1.547+/-0.802 ug/g b) 4.884+/-4.571 ug/g Fat basis	a) From samples with >2% fat (mean 3.84%), older animals b) <2% fat (mean 1.06%), younger animals 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

Fish (G. ruffa)
GARRA RUFFA

Tissue	Cases Exposure Route	Range	Mean	General Information
6542 Muscle	2	Not given	1.189+/-0.277 ug/g fat	From samples with mean of 4.25% fat. 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

BHC, total (No postings in CHEMLINE).

C6-H6-Cl6
MW 290.85

Fish (H. fossilis)
HETEROPNEUSTES FOSSILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6543 Muscle	3	a) Not given b) Not given	a) 4.372 ug/g b) 7.083 ug/g Fat basis	a) From samples with >2% fat (mean 2.58%), older animals b) <2% fat (mean 1.80%), younger animals 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

Fish (L. abu)
LIZA ABU

Tissue	Cases Exposure Route	Range	Mean	General Information
6544 Muscle	11	a) Not given b) Not given	a) 5.026+/-2.346 ug/g b) 5.938+/-5.682 ug/g Fat basis	a) From samples with >2% fat (mean 2.40%), older animals b) <2% fat (mean 0.94%), younger animals 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

Fish (M. pelusius)
MYSTUS PELUSIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6545 Muscle	4	Not given	3.468+/-3.210 ug/g fat	From samples with mean of 0.47% fat. 1-3 yr old fish collected during 10/83-7/84 from river where sewage treatment plant in Baghdad discharges treated water. India, Baghdad, Diyala River GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; WATER POLLUTION; PESTICIDES; MUSCLES; CHLORINE ORGANIC COMPOUNDS; ALDRIN; DDT; INDIA Al-Omar, M.A.; Al-Ogaily, N.H.; Shebil, D.-A. 1986 Bulletin of Environmental Contamination and Toxicology 36:109-113				

BHC, total (No postings in CHEMLINE).

C6-H6-Cl6
MW 290.85

Fish (T. zillii)
TILAPIA ZILLII

Tissue	Cases Exposure Route	Range	Mean	General Information
6546 Muscle	a) 20 b) 14	a) 1.98-15.10 ug/kg b) <0.1-3.57 ug/kg Wet wt	a) 6.94 ug/kg b) 1.85 ug/kg Wet wt	a) El-Manzala Lake b) El-Burullus Lake Nile Delta lakesite of collection. Proposed species studied be used as biomonitors for pesticide contamination. Egypt GC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; EGYPT; PESTICIDES; LINDANE; DDT; DDD; DDE; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; BIOLOGICAL MONITORING Badawy, M.I.; El-Dib, M.A. 1984 Environment International 10:3-8				

Francolin
FRANCOLINIS NATALENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6547 Adipose	1	Not applicable	0.33 mg/kg	Shot in field area near Settler, 1978. Fat extracted from muscle, liver, skin. South Africa GC
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; FISHES; PESTICIDES; PESTICIDE RESIDUES; ADIPOSE TISSUE; DDT; DDE; DIELDRIN; ENDOSULFAN; BENZENE HEXACHLORIDE; SOUTH AFRICA; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS Pick, F.E.; de Beer, P.R.; van Dyk, L.P. 1981 Chemosphere 10(11/12):1243-1251				

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6548 Adipose	16	0.146-1.522 ppm Wet wt	0.536+/-0.100 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
6549 Bone marrow	8	0.114-0.470 ppm Wet wt	0.203+/-0.044 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

(next page)

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85

Goat
CAPRA sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6550 Brain	14	0.033-0.115 ppm Wet wt	0.068+/-0.007 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
6551 Liver	18	0.020-0.067 ppm Wet wt	0.032+/-0.002 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
6552 Muscle	24	0.01-0.034 ppm Wet wt	0.018+/-0.002 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

Goose, Egyptian
ALOPOCHEN AEGYPTIACUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6553 Adipose	3	2.06-15.69 mg/kg	7.15 mg/kg	Found dead in Carolina district, 1978, fat from samples. South Africa GC
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; FISHES; PESTICIDES; PESTICIDE RESIDUES; ADIPOSE TISSUE; DDT; DDE; DIELDRIN; ENDOSULFAN; BENZENE HEXACHLORIDE; SOUTH AFRICA; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS Pick, F.E.; de Beer, P.R.; van Dyk, L.P. 1981 Chemosphere 10(11/12):1243-1251				

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85
Guinea fowl
NUMIDA MELEAGRIS MITRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6554 Adipose	a) 1 b) 1	a) Not applicable b) Not applicable	a) 0.05 mg/kg b) 0.74 mg/kg	a) Shot in field area near Settlers b) Found dead, Bethel District Collections in 1978. Fat extracted from muscle, liver, skin or samples from dead animals. South Africa GC
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; FISHES; PESTICIDES; PESTICIDE RESIDUES; ADIPOSE TISSUE; DDT; DDE; DIELDRIN; ENDOSULFAN; BENZENE HEXACHLORIDE; SOUTH AFRICA; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS Pick, F.E.; de Beer, P.R.; van Dyk, L.P. 1981 Chemosphere 10(11/12):1243-1251				

Kite, pariah
MILVUS MIGRANS

Tissue	Cases Exposure Route	Range	Mean	General Information
6555 Adipose	3	3.328-12.414 ppm Wet wt	5.468 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6556 Blood, plasma	3	0.043-0.094 ppm Wet wt	0.060 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6557 Brain	3	0.030-0.168 ppm Wet wt	0.093 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6558 Heart	3	Not given	0.107 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6559 Kidney	3	Not given	0.072 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6560 Liver	3	Not given	0.219 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

(next page)

BHC, total (No postings in CHEMLINE).
C6-H6-Cl6
MW 290.85

Kite, pariah
MILVUS MIGRANS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6561 Lung	3	Not given	0.097 pm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6562 Muscle	3	Not given	0.310 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
6563 Spleen	3	Not given	0.189 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Kurper
SAROTHERODEN sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6564 Adipose	a) 3 b) 1	a) 0.16-0.37 mg/kg b) Not applicable	a) 0.23 mg/kg b) 4.67 mg/kg	a) From Olifants River (near Marble Hall, 200 km NE of Pretoria), Olifants River Dam (near Phalaborwa, 450 km Ne of Pretoria), Letalea River (hans Merensky Nature Reserve) b) Found dead, Njelele Dam Collections in 1978. Fat extracted from muscle, liver, skin or samples from dead animals. South Africa GC
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; FISHES; PESTICIDES; PESTICIDE RESIDUES; ADIPOSE TISSUE; DDT; DDE; DIELDRIN; ENDOSULFAN; BENZENE HEXACHLORIDE; SOUTH AFRICA; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS Pick, F.E.; de Beer, P.R.; van Dyk, L.P. 1981 Chemosphere 10(11/12):1243-1251				

Bicyclo(2.2.1)heptane, 2,2,5,6-tetrachloro-1,7,7-tris(chloromethyl)-, (5-endo,6-exo)-
51775-36-1
C10-H11-Cl7
Trout, lake
SALVELINUS NAMAYCUSH

Tissue	Cases Exposure Route	Range	Mean	General Information
6576 Adipose	4	0.04-0.21 ug/g Wet wt	0.10+/-0.07 ug/g S.E. Wet wt	One of the primary toxic constiutents of toxaphene, measured in the "belly flap" region of fish collected 8/6/82. Because of environmental alteration of technical toxaphene, measurement of toxic congeners a toxicologically relevant measure of residues. Michigan, Muskegon, Lake Michigan GC/MS; TLC
MEASUREMENT METHODS; FISHES; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; AQUATIC; MICHIGAN Gooch, J.W.; Matsumura, F. 1985 Journal of Agricultural and Food Chemistry 33:844-848				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
6577 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) Not detected b) Not detected c) Not detected d) 0.12 ug/g Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Bayou Petite Prairie c) 2 from Spring Bayou d) 3 from Raccouri Old River Collected 6/81, 2.3-6.6% lipids, wt 307-431 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V ; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Bass, rock
AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6578 Body		Not applicable	2.01 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bass, striped
MORONE SAXATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6579 Eggs	2	1.77-3.33 ug/g	2.20 ug/g	Collected Patapsco River, spring, 1976. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.001 ug/g. Value below established action level. Mean calculated by extractor. Maryland, Chesapeake Bay and tributaries GC-EC
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; MUSCLES; EGGS; GONADS; DDT; DDE; DDD; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M; Topping, J.J. 1985 Journal of Environmental Science and Health B20(6):729-742				

Tissue	Cases Exposure Route	Range	Mean	General Information
6580 Fillets	48	a) 1.0-8.1 ug/g b) 1.0-7.8 ug/g c) 0.7-2.5 ug/g d) 1.1-7.4 ug/g Wet wt	a) 2.7+/-1.7 ug/g b) 2.4+/-1.7 ug/g c) 1.3+/-0.6 ug/g d) 3.0+/-1.8 ug/g Wet wt	a) Standard filets (with skin and adipose) determined by peak to peak summation, 48 cases b) Determined by pattern matching, same 48 c) Trimmed filets (skin and adipose tissue removed), 15 randomly selected from above cases d) Standard filets from same 15 fish 2 fish with >2 S.D. from mean excluded from a) and b). No correlation found between levels and length of fish. Collected, fall 1981. New York, Hudson River near Nyack GC-EC
FILLETS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; COMPARATIVE EVALUATIONS; POLYCHLORINATED BIPHENYLS; INDUSTRIAL CHEMICALS; BIOACCUMULATION; WATER POLLUTION White, R.J.; Kim, H.T.; Kim, J.S. 1985 Bulletin of Environmental Contamination and Toxicology 34;883-889				

Tissue	Cases Exposure Route	Range	Mean	General Information
6581 Gonads	10	0.7-1.6 ug/g	7.74 ug/g	Collected Rock hall Region, April 1979. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.01 ug/g. Value below established action level. Mean calculated by extractor. Maryland, Chesapeake Bay and tributaries GC-EC

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Bass, striped
MORONE SAXATILIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6582 Muscle	a) 1 b) 10	a) Not applicable b) 0.7-1.6 ug/g	a) Not detected b) 1.11 ug/g	a) Collected Patapsco River, spring, 1976 b) Collected Rock hall Region, April 1979 Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.01 ug/g. Value below established action level. Mean calculated by extractor. Maryland, Chesapeake Bay and tributaries GC-EC
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; MUSCLES; EGGS; GONADS; DDT; DDE; DDD; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M; Topping, J.J. 1985 *Journal of Environmental Science and Health B20(6):729-742*				

Bat

Tissue	Cases Exposure Route	Range	Mean	General Information
6583 Body, whole				Review. Part of extensive coverage of organochlorines and metals found in surveys and some experimental feeding studies. 25 species in 5 countries were surveyed. United States; Nigeria; England; Australia; Mexico
6584 Brain				Review. Part of extensive coverage of organochlorines and metals found in surveys and some experimental feeding studies. 25 species in 5 countries were surveyed. USA: Nigeria; England; Australia; Mexico
6585 Carcass				Review. Part of extensive coverage of organochlorines and metals found in surveys and some experimental feeding studies. 25 species in 5 countries were surveyed. USA: Nigeria; England; Australia; Mexico
ENVIRONMENTAL EXPOSURE; REVIEW; DELIBERATE EXPOSURE; TERRESTRIAL; BATS; CARCASS; BODY; LIVER; ADIPOSE TISSUE; BRAIN; GASTROINTESTINAL SYSTEM; MAMMARY GLANDS; MILK; HEART; LUNGS; KIDNEYS; SKIN; MUSCLES; HAIR; PESTICIDES; PESTICIDE RESIDUES; INSECTICIDES; DDT; DDD; DDE; DIELDRIN; LINDANE; POLYCHLORINATED BIPHENYLS; MIREX; HEPTACHLOR EPOXIDE; OXYCHLORDANE; SELENIUM; MERCURY; LEAD; METALS Clark, D.R. 1981 U.S. Department of the Interior, Special Scientific Report - Wildlife No. 235, 27 pp.				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Blackbird
TURDUS MERULA

Tissue	Cases Exposure Route	Range	Mean	General Information
6586 Muscle	1	Not applicable	0.06 ppm Wet wt	Adult, 94 g. Shot 7/76. Sweden, Vastergotland Vanersborg GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS

Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Blackbird, Brewer's
EUPHAGUS CYANOCEPHALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6587 Carcass	a) 25 b) 79	a) 0.12-0.91 ppm b) 0.11-0.87 ppm Wet wt	a) 0.14+/-0.05 ppm b) 0.13+/-0.10 ppm S.E. Wet wt Arithmetic	a) Detected in 8/25 individuals b) Detected in 3/9 composite samples. Migratory omnivores, prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. Colorado; Utah; Wyoming; Idaho; Oregon; Montana GC-EC

CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES

DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693

Blackbird, red-winged
AGELAIUS PHOENICEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6588 Carcass	44	0.11-0.99 ppm Wet wt	0.22+/-0.19 ppm S.E. Wet wt Arithmetic	Detected in 2 of 5 composite samples. Nonmigratory omnivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. Colorado; Utah; Idaho; Oregon; Montana GC-EC

CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES

DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Blackbird, yellow-headed
XANTHOCEPHALUS XANTHOCEPHALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6589 Carcass	44	Not detected-0.37 ppm Wet wt	0.07+/-0.07 ppm S.E. Wet wt Arithmetic	Detected in 1 of 5 composite samples. Migratory omnivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. Utah; Idaho; Oregon GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6590 Body		Not applicable	10.68 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Boar
SUS SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
6591 Liver	5	0.09-0.11 ppm Wet wt	0.103 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Boar
SUS SCROFA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6592 Muscle	5	0.045-0.18 ppm Wet wt	0.092 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Bream
ABRAMIS BRAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
6593 Muscle	1	Not applicable	22 mg/kg Fat basis	Caught 1980, Haggan River, 1.5% fat content. Sweden GC/MS; GC-EC
SWEDEN; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; DDT; POLYCHLORINATED BIPHENYLS; BROMINATED HYDROCARBONS; WATER POLLUTION Anderson, O.; Blomkvist, G. 1981 Chemosphere 10(9):1051-1060				

Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6594 Body		Not applicable	0.75 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Bullhead, brown
ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6595 Body		Not applicable	2.98 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, yellow
ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6596 Body		Not applicable	1.72 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Canvasback
AYTHYA VALISINERIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6597 Adipose	5	0.98-13.0 ug/g Wet wt	4.32 ug/g Wet wt	Collected 12/6/81. Adults and juvenile, 1.15-1.58 kg, shot by hunters. New York, Hudson River GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Canvasback
AYTHYA VALISINERIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6598 Blood				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay

ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS
Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf

Tissue	Cases Exposure Route	Range	Mean	General Information
6599 Muscle	4	0.11-0.66 ug/g Wet wt	0.26 ug/g Wet wt	Breast Collected 12/6/81. Adults and juvenile, 1.40-1.58 kg, shot by hunters. New York, Hudson River GC-EC

ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL
Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
6600 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 1.28 mg/ml b) 38.60 mg/ml c) 98.44 mg/ml d) 3.195 mg/ml e) 17.73 mg/ml f) 0.175 mg/ml g) 9.53 mg/ml h) 7.22 mg/ml i) 20.89 mg/ml	a) Black River, OH, 10/21/81 b) Sheboygan River, WI, 9/30/80 c) Another sample, same as b) d) Menominee River, WI, 8/15/81 e) Kinnickinnic River, WI, 7/15/81 f) Wolf River, WI, 9/15/80 g) Fox River, WI, above DePere, 10/10/80 h) Same, except 11/15/81 i) Fox River, below DePere, 10/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
6601 Liver	1	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable	a) <0.1 mg/kg b) <0.1 mg/kg c) 22 mg/kg d) 120 mg/kg e) 95 mg/kg f) 71 mg/kg g) 802 mg/kg Lipid basis	a) PCB 28 b) PCB 52 c) PCB 101 d) PCB 138 e) PCB 153 f) PCB 180 g) Total PCB (60% Cl) Compound analyzed. Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE, DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Catfish
ANARHICHAS LUPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6602 Liver	a) 6 b) 2	a) 250-650 ug/kg b) Not detected-42 ug/kg Wet wt	a) 423+/-190 ug/kg b) 42 ug/kg Wet wt	a) 1977 b) 1982 Year of collection in Sogndalsfjord. Limit of detection 5 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES, BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6603 Body, whole	25	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.212 ppm b) 0.136 ppm c) 0.168 ppm d) 0.018 ppm e) 0.020 ppm f) 0.026 ppm	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.1 ppm. Means d), e), and f) exceeded by S.E. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION
Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Tissue	Cases Exposure Route	Range	Mean	General Information
6604 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.05 ug/g b) 0.29 ug/g c) Not detected d) Not detected e) Not detected f) 0.01 ug/g Wet wt Geometric	a) 3 composite samples from Lake Verret b) 1 from lake Fausse Point c) 1 from Little Pigeon Bayou d) 3 from Grand Lake e) 1 from Henderson Lake f) 3 from Raccouri Old River Collected 6/81, 1.3-6.5% lipids, wt 57-317 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6605 Muscle	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.1 ppm. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION
Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Charr
SALVELINUS ALPINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6606 Eggs		a) 0.10-0.50 ppm b) 10-78 ppm	a) 0.21 ppm b) 31 ppm	a) Wet weight b) Lipid weight Mean calculated from table. Ova from 18 females collected 12/15, 12/16, and 12/22/81, fertilized with sperm of males (3 males/female) captured at same time. Significant positive correlation between PCB levels (lipid wt basis) and total mortality rates ($p<0.01$). Switzerland, Lake Geneva Total mortality highly variable (5-76%) between spawns.

EGGS; FISHES; AQUATIC; DDT; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; WATER POLLUTION; ENVIRONMENTAL EXPOSURE; SWITZERLAND
Monod, G. 1985 Bulletin of Environmental Contamination and Toxicology 35:531-536

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6607 Adipose	a) 95 b) 81 c) 49 d) 30 e) 102 f) 180	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 946 ug/kg b) 54 ug/kg c) 195 ug/kg d) 391 ug/kg e) 6.5 ug/kg f) 4.8 ug/kg	a) 1969-70, 19 composite samples b) 1971-72, 21 composite samples c) 1973-74, 17 composite samples d) 1975-76, 9 composite samples e) 1979-80, 21 composite samples f) 1981-82, 50 composite samples Abdominal fat. Canada, Ontario
6608 Eggs	a) 120 b) 124 c) 64 d) 10 e) 101	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 405 ug/kg b) 209 ug/kg c) 255 ug/kg d) 126 ug/kg e) <10 ug/kg	a) 1969-70, 30 composite samples b) 1971-72, 31 composite samples c) 1973-74, 22 composite samples d) 1975-76, 4 composite samples e) 1979-80, 31 composite samples Fat. Canada, Ontario
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; ADIPOSE TISSUE; EGGS; CHICKENS; CANADA, FOOD CONTAMINATION; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; CHLORDANE; LINDANE; POLYCHLORINATED BIPHENYLS; BIRDS Frank, R.; Rasper, J.; Braun, H.E.; Ashton, G. 1985 Journal of the Association of Official Analytical Chemists 68(1):124-129				

Chub, Rio Grande
GILA NIGRESCENS

Tissue	Cases Exposure Route	Range	Mean	General Information
6609 Body, whole	16	40-60 ng/g Wet wt	Not given	Collected Jun-Aug 1980, 198[illegible]2 at Monte Vista National Wildlife Refuge, CO. Length 81-117 mm, avg wt 10 g. Data also given for mixed species. Colorado GC
ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS, COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Clam
CORBICULA FLUMINEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6610 Body		a) Not given b) 0.80+/-0.09-0.69+/-0.12 ug/g c) 0.89+/-0.13-0.55+/-0.05 ug/g d) 0.77+/-0.06-0.65+/-0.02 ug/g Wet wt S.E. Ranges of means	a) 0.38+/-0.08 ug/g b) Not given c) Not given d) Not given Wet wt S.E.	a) Controls, 100% clean sand b) 10% contaminated sediment (v/v). Day 3 and d 136, peak 2.80 ug/g d 60 c) 50% contaminated sediment. Day 3 and d 136, peak 1.70 ug/g d 60 d) 100% contaminated sediment. Day 3 and d 136, peaks 2.30 ug/g d) 51 and d 72 Exposed for 48 d to sediment, from Sheboygan River, WI, containing environmental contaminants. 88 d depuration followed. Background levels in animals 0.49 ug/g wet wt. Contaminants measured were Aroclors 1242 and 1254.
MOLLUSKS; AQUATIC; DELIBERATE EXPOSURE; WATER POLLUTION; LEAD; CADMIUM; POLYCHLORINATED BIPHENYLS; JUVENILES; CRUSTACEANS Tatem, H.E. 1986 Archives of Environmental Contamination and Toxicology 15:171-183				

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
6611 Liver	a) 7 b) 18 c) 3	a) 70-1010 ug/kg b) 175 1073 ug/kg c) 70-1010 ug/kg Wet wt	a) 684+/-179 ug/kg b) 454+/-258 ug/kg c) 486+/-479 ug/kg Wet wt	a) Sogndalsfjord, 1977 b) 1982 c) Dalsfjord, 1977 Location and year collected. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Cormorant, double-crested
PHALACROCORAX AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6612 Body		Not given	1.0 ug/kg	Average of 3 samples of nestling collected in 1983 from Spider Island and Gravelly Island, Lake Michigan. Excludes o,o'-chlorine substituted PCBs. CC; EC
FISHES; BIRDS, ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; EGGS; WISCONSIN; GREAT LAKES; BIOMAGNIFICATION; POLYCHLORINATED DIBENZOFURANS; POLYCHLORINATED DIBENZODIOXINS; POLYCHLORINATED BIPHENYLS Stalling, D.L.; Norstrom, R.J.; Smith, L.M.; Simon, M. 1985 Chemosphere 14(6/7):627-643				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Cormorant, olivaceous
PHALACROCORAX OLIVACEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6613 Carcass	a) 8 b) 10	a) 2.6-11 ppm b) 2.6-24 ppm Wet wt	a) 6.36 ppm b) 7.61 ppm Wet wt Geometric mean	a) 1980 b) 1981 Shot with steel shot at Atkinson Island. Carcasses analyzed did not include skin, bills, feet, gastrointestinal tracts, livers, or kidneys. Texas, Galveston Bay CC; GLC-EC
6614 Eggs	a) 13 b) 18	a) 0.5-11 ppm b) 0.9-19 ppm Wet wt	a) 3.59 ppm b) 5.02 ppm Wet wt Geometric mean	a) 1980 b) 1981 Collected from nests early each nesting season. Texas, Galveston Bay CC; GLC-EC
BIRDS; TEXAS; CHLORINE ORGANIC COMPOUNDS; ENVIRONMENTAL EXPOSURE; AQUATIC; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDD; DDE; DIELDRIN; STYRENES; PESTICIDE RESIDUES; WATER POLLUTION; EGGS; BODY King, K.A.; Krynitsky, A.J. 1986 Archives of Environmental Contamination and Toxicology 15:367-376				

Crab, fiddler (U. minax)
UCA MINAX

Tissue	Cases Exposure Route	Range	Mean	General Information
6615 Body	a) 2 b) 2	a) Not given b) Not given	a) 0.20 ug/g b) 0.30 ug/g	a) Substrate of whole mud containing 1.04 ug/g b) Mud-sand mixture (50/50, v/v) containing 0.37 ug/g Day 14. Placed on uncontaminated substate on day 42, no PCB by day 63. Contaminated sediment was dredged from NY Harbor. Florida GC-EC
DELIBERATE EXPOSURE; CRABS; AQUATIC; BODY; POLYCHLORINATED BIPHENYLS; WATER POLLUTION; INDUSTRIAL POLLUTION Clark, J.R.; Patrick, J.M.; Moore, J.C.; Forester, J. 1986 Bulletin of Environmental Contamination and Toxicology 36:571-578				

Crab, fiddler (U. pugilator)
UCA PUGILATOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6616 Body	a) 2 b) 2	a) Not given b) Not given	a) 0.21 ug/g b) 0.22 ug/g	a) Substrate of whole mud containing 1.04 ug/g b) Mud-sand mixture (50/50, v/v) containing 0.37 ug/g Day 14. Placed on uncontaminated substate on day 42, no PCB by day 56. Contaminated sediment was dredged from NY Harbor. Florida GC-EC
DELIBERATE EXPOSURE; CRABS; AQUATIC; BODY; POLYCHLORINATED BIPHENYLS; WATER POLLUTION; INDUSTRIAL POLLUTION Clark, J.R.; Patrick, J.M.; Moore, J.C.; Forester, J. 1986 Bulletin of Environmental Contamination and Toxicology 36:571-578				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6617 Body, whole	25	a) Not given b) Not given c) Not given d) Not applicable e) Not applicable f) Not given	a) 0.060 ppm b) 0.124 ppm c) 0.066 ppm d) 0.154 e) Not detected f) 0.052 ppm	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.10 ppm. Means a) and f) exceeded by S.E. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6618 Body		Not applicable	15.54 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Tissue	Cases Exposure Route	Range	Mean	General Information
6619 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) 0.03 ug/g Wet wt Geometric	a) 3 composite samples from Lake Fausse Point b) 3 from Little Pigeon Bayou c) 2 from Henderson Lake d) 1 from Bayou Petite Prairie e) 2 from Spring Bayou f) 3 from Raccouri Old River Collected 6/81, 1.3-4.1% lipids, wt 92-251 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Crayfish
PROCAMBARUS CLARKII

Tissue	Cases Exposure Route	Range	Mean	General Information
6620 Body, whole	60	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.060 ppm b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 10 individuals. Limit of detection 0.10 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Deer, fallow
DAMA DAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
6621 Liver	8	0.07-0.12 ppm Wet wt	0.085 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
6622 Muscle	8	0.07-0.12 ppm Wet wt	0.090 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Deer, red
CERVUS ELAPHUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6623 Liver	8	0.07-0.22 ppm Wet wt	0.137 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
6624 Muscle	8	0.04-0.18 ppm Wet wt	0.101 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Dolphin, striped
STENELLA COERULEOALBA

Tissue	Cases Exposure Route	Range	Mean	General Information
6625 Adipose	1	28,400-32,700 ng/g Lipit wt	30,700 ng/g Lipid wt	Mean of levels from 3 different areas, front, center and rear. 16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6626 Blood	1	Not applicable	12,800 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6627 Brain	1	a) Not applicable b) Not applicable c) Not applicable	a) 1410 ng/g b) 1530 ng/g c) 1200 ng/g Lipid wt	a) Cerebrum b) Cerebellum c) Medulla oblongata 16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6628 Heart	1	Not applicable	12,100 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6629 Intestine	1	Not applicable	9900 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6630 Kidney	1	Not applicable	11,200 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6631 Liver	1	Not applicable	6600 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6632 Lung	1	Not applicable	11,600 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6633 Muscle	1	16,600-21,300 ng/g Lipid wt	19,500 ng/g Lipid basis	Mean of levels from 6 different areas, front, center and rear. 16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC
6634 Stomach	1	Not applicable	9200 ng/g Lipid wt	16.5 yr old animal 160.5 kg, 238 cm in length collected 12/19/78. Data also presented on fresh wt basis and as total burden. Japan, Taiji (Pacific Coast) GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; DOLPHINS; JAPAN; PACIFIC OCEAN; ADIPOSE TISSUE; MUSCLES; KIDNEYS; LIVER; INTESTINES; LUNGS; HEART; STOMACH; BLOOD; BRAIN; CEREBRUM; CEREBELLUM; MEDULLA; POLYCHLORINATED BIPHENYLS; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION

Tanabe, S.; Tatsukawa, R.; Tanaka, H.; Maruyama, K.; Miyazaki, N.; Fujiyama, T. 1981 Agricultural and Biological Chemistry 45(11):2569-2578

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Dove, mourning
ZENAIDA MACROURA

Tissue	Cases Exposure Route	Range	Mean	General Information
6635 Muscle				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Dove, rock
COLUMBA LIVIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6636 Carcass	16	Not detected-1.38 ppm Wet wt	0.46+/-0.46 ppm S.E. Wet wt Arithmetic	Detected in 1 of 3 composite samples. Nonmigratory granivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico; Idaho; Oregon GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Tissue	Cases Exposure Route	Range	Mean	General Information
6637 Muscle	10	0.01-0.12 ppm Wet wt	0.04+/-0.03 ppm Wet wt	Adults, mean wt 334+/-23 g. Shot 7/76. Sweden, Vastergotland, Vanersborg GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Duck, black
ANAS RUBRIPES

Tissue	Cases Exposure Route	Range	Mean	General Information
6638 Adipose	17	0.59-20.0 ug/g Wet wt	6.64 ug/g Wet wt	Collected 10/14-12/12/81. Adults and juveniles, 1.05-1.48 kg, shot by hunters. New York, Hudson River GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Tissue	Cases Exposure Route	Range	Mean	General Information
6639 Eggs				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Tissue	Cases Exposure Route	Range	Mean	General Information
6640 Liver	2	0.16-0.29 ug/g Wet wt	0.22 ug/g Wet wt	Collected 12/12/81. Adult and juvenile, 1.80 and 1.05 kg, shot by hunters. New York, Hudson River GC-EC
6641 Muscle	17	0.05-0.69 ug/g Wet wt	0.24 ug/g Wet wt	Breast Collected 10/14-12/12/81. Adults and juveniles, 1.05-1.48 kg, shot by hunters. New York, Hudson River GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Duck, black
ANAS RUBRIPES

Tissue	Cases Exposure Route	Range	Mean	General Information
6642 Wing		0.15+/-0.00-1.49+/-0.00 ppm S.E. Wet wt	0.63+/-0.09 ppm S.E. Wet wt	Range of means, various states in Atlantic flyway, 1979-80. 24 pools, usually of 25 wings each. Mean from literature, 1976 was 0.52+/-0.08 ppm. Detection limit 0.01 ppm. Atlantic flyway, eastern states from Vermont to Florida GC-EC
ENVIRONMENTAL EXPOSURE; BIRDS; WINGS; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; UNITED STATES; WATER POLLUTION; DDE; DDT; TDE; DIELDRIN; POLYCHLORINATED BIPHENYLS Cain, B.W. 1981 Pesticides Monitoring Journal 15(3):128-134				

Tissue	Cases Exposure Route	Range	Mean	General Information
6643 Wing				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Duck, mallard
ANAS PLATYRHYNCHOS

Tissue	Cases Exposure Route	Range	Mean	General Information
6644 Adipose	10	0.34-14.0 ug/g Wet wt	5.2 ug/g Wet wt	Collected 10/14/81. Adults, 1.13-1.35 kg, shot by hunters. New York, Great South Bay GC-EC
6645 Liver	12	Not applicable	0.23 ug/g Wet wt	Collected 10/14/81. Adult, 1.13 kg, shot by hunter. New York, Hudson River GC-EC
6646 Muscle	12	0.07-1.1 ug/g Wet wt	0.31 ug/g Wet wt	Breast Collected 10/14/81 and 6/71/81. Adults, 1.13-1.35 kg, 11 cases shot by hunters, 1 case died of parathion poisoning. New York, Hudson River and Great South Bay GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Duck, mallard
ANAS PLATYRHYNCHOS

Tissue	Cases Exposure Route	Range	Mean	General Information
6647 Wing		a) 0.05+/-0.03-1.17+/-0.00 ppm b) 0.03+/-0.01-0.51+/-0.09 ppm c) 0.01+/-0.01-0.12+/-0.02 ppm d) 0.01+/-0.00-0.27+/-0.21 ppm S.E. Wet wt	a) 0.45+/-0.07 ppm b) 0.11+/-0.02 ppm c) 0.06+/-0.01 ppm d) 0.07+/-0.02 ppm S.E. Wet wt	a) Atlantic flyway, 29 pools (total 29) b) Mississippi flyway, 63 pools (total 64) c) Central flyway, 49 pools (total 54) d) Pacific flyway, 41 pools (total 44) Ranges of means, except c). Numbers of pools (out of totals) with detectable levels. From various states in these flyways, 1979-80. Usually 25 wings/pool. Means from literature were 0.52+/-0.18, 0.23+/-0.03, 0.15+/-0.01, 0.16+/-0.04 ppm. Detection limit 0.01 ppm. GC-EC
ENVIRONMENTAL EXPOSURE; BIRDS; WINGS; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; UNITED STATES; WATER POLLUTION; DDE; DDT; TDE; DIELDRIN; POLYCHLORINATED BIPHENYLS Cain, B.W. 1981 Pesticides Monitoring Journal 15(3):128-134				

Tissue	Cases Exposure Route	Range	Mean	General Information
6648 Wing				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Duck, tufted
AYTHYA FULIGULA

Tissue	Cases Exposure Route	Range	Mean	General Information
6649 Muscle	3	0.11-0.40 ppm Wet wt	0.21+/-0.17 ppm Wet wt	Adults, mean wt 832+/-110 g. Shot 6/76-7/76. Sweden, Norrbotten, Gallivare GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Duck, wood
AIX SPONSA

Tissue	Cases Exposure Route	Range	Mean	General Information
6650 Adipose	4	0.64-9.0 ug/g Wet wt	3.14 ug/g Wet wt	Collected 10/14/81. Adults, 0.68-0.74 kg, shot by hunters. New York, Hudson River GC-EC
6651 Muscle	4	0.08-0.12 ug/g Wet wt	0.10 ug/g Wet wt	Breast Collected 10/14/81. Adults, 0.68-0.74 kg, shot by hunters. New York, Hudson River GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Eagle, bald
HALIAEETUS LEUCOCEPHALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6652 Body				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Eagle, white-tailed
HALIAEETUS ALBICILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6653 Brain	1	Not applicable	104000 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
6654 Eggs	4	8000-144000 ng/g Wet wt	48200+/-64400 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
6655 Kidney	1	Not applicable	232000 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Eagle, white-tailed
HALIAEETUS ALBICILLA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6656 Liver	1	Not applicable	525000 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
6657 Muscle	4	107000-554000 ng/g Wet wt	381000+/-205000 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Earthworm

Tissue	Cases Exposure Route	Range	Mean	General Information
6658 Body		a) 9.4-15.2 mg/kg b) 330-574 mg/kg c) 609-685 mg/kg Wet wt	a) Not given b) Not given c) Not given	a) Controls, worms from untreated nature reserve at Buren b) Vineyard worms, digestive tract cleaned with filter paper c) Vineyard worms, cleaned with silica powder Vineyard at Chardonne treated with contaminated compost in 1980. France
BODY; EARTHWORMS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FRANCE; POLYCHLORINATED BIPHENYLS; METALS; CADMIUM; ZINC; LEAD; COPPER; CHROMIUM; BIOACCUMULATION; SEWAGE; LAND POLLUTION Diercxsens, P.; de Weck, D.; Borsinger, N.; Rosset, B.; Tarradellas, J. 1985 Chemosphere 14(5):511-522				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Eel
ANGUILLA ANGUILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6659 Muscle	a) 1 b) 2 c) 19 d) 5 e) 5 f) 10	a) Not applicable b) 2.8-5.2 mg/kg c) 1.6-8.6 mg/kg d) 4.1-7.2 mg/kg e) 1.8=3.6 mg/kg f) 1.4-2.8 mg/kg Fat basis	a) 8.7 mg/kg b) 4.0 mg/kg c) 4.6 mg/kg d) 5.4 mg/kg e) 2.3 mg/kg f) 1.9 mg/kg Fat basis	a) Caught 1980, upper Viskan River before junction with Haggan River, 24% fat content b) Caught 1981, Haggan River, 8.6% fat content c) Caught 1980, lower Viskan River 5.0% fat content d) Caught 1979, outflow of Viskan River at Klosterfjorden Bay, 9.1% fat content e) Caught 1979, Klosterfjorden Bay, 4.7% fat content f) Caught 1980, Klosterfjorden :Bay, 10% fat content. Sweden GC/MS; GC-EC
SWEDEN; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; DDT; POLYCHLORINATED BIPHENYLS; BROMINATED HYDROCARBONS; WATER POLLUTION Anderson, O.; Blomkvist, G. 1981 Chemosphere 10(9):1051-1060				

Egret, cattle
BUBULCUS IBIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6660 Brain	a) 2 b) 1 c) 3	a) 1.1-1.7 ppm b) Not detected c) Not detected Wet wt	a) 1.4 ppm b) Not detected c) Not detected Wet wt	a) Maryland, adults, dieldrin poisoning, 6/78 b) Nebraska, adult, possible dieldrin poisoning, 5/78 c) New Mexico, dead chicks, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. GLC
6661 Carcass	a) 2 b) 1 c) 1 d) 3	a) 0.45-1.4 ppm b) Not detected c) Not detected d) 1.4-3.0 ppm Wet wt	a) 0.93 ppm b) Not detected c) Not detected d) 2.03 ppm Wet wt	a) Maryland, adults, dieldrin poisoning, 6/78 b) Alabama, adult shot 7/70 c) Nebraska, adult, possible dieldrin poisoning, 5/78 d) New Mexico, dead chicks, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. GLC
BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Egret, great
CASMERODIUS ALBUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6662 Brain	a) 4 b) 1	a) 0.29-2.1 ppm b) Not applicable Wet wt	a) 0.91 ppm b) 2.4 ppm Wet wt	a) Minnesota, adults and chicks, 6/75-6/76 b) California, adult, 7/78 Part of large study of organochlorines and mortality in herons. Mean calculated by extractor. Detection limit 0.05 ppm. GLC
6663 Carcass	a) 2 b) 2 c) 1 d) 4 e) 1	a) Not detected b) Not detected c) Not applicable d) 0.22-0.95 ppm e) Not applicable Wet wt	a) Not detected b) Not detected c) 9.0 ppm d) 0.58 ppm e) 3.8 ppm Wet wt	a) Maryland, 6/69 b) Louisiana, fledged immatures, 7/71 c) Michigan, adult shot 5/70 d) Minnesota, adults and chicks, 6/75-6/76 e) California, adult, 7/78 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. Mean in d) calculated by extractor. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Egret, snowy
EGRETTA THULA

Tissue	Cases Exposure Route	Range	Mean	General Information
6664 Brain	1	Not detected	Not detected	Dead chick, 6/77. Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. New Mexico GLC
6665 Carcass	a) 6 b) 1 c) 1 d) 1	a) Not detected-0.13 ppm b) Not applicable c) Not applicable d) Not applicable Wet wt	a) Not applicable b) 0.10 ppm c) 0.10 ppm d) 0.82 ppm Wet wt	a) Maryland, chicks, 6/69 b) Alabama, fledged immature shot 7/70 c) Louisiana, fledged immature, 7/71 d) New Mexico, dead chick, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Falcon, peregrine
FALCO PEREGRINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6666 Eggs	39	a) Not given b) Not given	a) 22.8 ppm b) 57 ppm Wet wt	a) Northern areas b) Southern areas Collected 1972-81. Sweden GC-EC
6667 Muscle	4	0.62-1.28 ppm Wet wt	1.11 ppm Wet wt	Nestlings found dead at two eyries, 1977. Weight range 290-400 g. Sweden, north GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Fieldfare
TURDUS PILARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6668 Muscle	a) 5 b) 10	a) 0.08-0.23 ppm b) 0.02-0.46 ppm Wet wt	a) 0.14+/-0.06 ppm b) 0.24+/-0.18 ppm Wet wt	a) Gallivare, Norrbotten, mean wt 89+/-6 g b) Vanersborg, Vastergotland, mean wt 92+/-11 g Adults, shot 6/76-7/76. Sweden GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
6669 Body, whole		0.13-14.6 ppm	Not given	Composite sample from 22 watersheds near Great Lakes, 1978. Total of 26 samples collected, included 138 individuals: walleye, carp, white sucker, channel catfish, freshwater drum, quillback, stone roller, goldfish, brown trout, hog sucker, coho salmon. US EPA Region V: Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, New York GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; MINNESOTA; WISCONSIN; MICHIGAN; OHIO; INDIANA; PENNSYLVANIA; NEW YORK; DDT; DDE; POLYCHLORINATED BIPHENYLS; HEPTACHLOR; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; OXYCHLORDANE; CHLORDANE; NONACHLOR Veith, G.D.; Kuehl, D.W.; Leonard, E.N.; Welch, K.; Pratt, G. 1981 Pesticides Monitoring Journal 15(1):1-8				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)

1336-36-3

EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
6670 Muscle	a) 145 b) 40 c) 51 d) 98 e) 24	a) Not detected-0.98 ug/g b) 0.030-0.51 ug/g c) 0.06-4.64 ug/g d) 0.01-1.60 ug/g e) 0.003-1.45 ug/g	a) 0.26 ug/g b) 0.28 ug/g c) 0.51 ug/g d) 0.29 ug/g e) 0.25 ug/g	a) Collected 1976 b) 1977 c) 1978 d) 1979 e) 1980 Collected in Maryland waters. Part of study identifying and quantifying organochlorine residues in samples from various regions of the bay. Detection limit 0.01 ug/g. Values below established action level. Maryland, Chesapeake Bay and tributaries GC-EC

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; MUSCLES; EGGS; GONADS; DDT; DDE; DDD; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M; Topping, J.J. 1985 Journal of Environmental Science and Health B20(6):729-742

Fish (A. spinifer)

ARGYROPS SPINIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6671 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 100.43 ug/kg b) 340.45 ug/kg c) 219.59 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES

El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Fish (S. auratus)

SPARUS AURATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6672 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 240.35 ug/kg b) 520.35 ug/kg c) 637.28 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES

El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Fish (S. aurita)
SARDINELLA AURITA

Tissue	Cases Exposure Route	Range	Mean	General Information
6673 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 30.38 ug/kg b) 74.7 ug/kg c) 10.25 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Fish (S. vulgaris)
SOLEA VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6674 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 124.6 ug/kg b) 900.53 ug/kg c) 1167.7 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Fish (Saurida sp.)
SAURIDA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6675 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 60.11 ug/kg b) 80.74 ug/kg c) 514.6 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Fish (Trichurus sp.)
TRICHURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6676 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 40.43 ug/kg b) 64.45 ug/kg c) 209.59 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES
El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Fish, black scabbard
APHANOPUS CARBO

Tissue	Cases Exposure Route	Range	Mean	General Information
6677 Liver	1	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable	a) 45 mg/kg b) 105 mg/kg c) 305 mg/kg d) 930 mg/kg e) 570 mg/kg f) 410 mg/kg g) 5800 mg/kg Lipid basis	a) PCB 28 b) PCB 52 c) PCB 101 d) PCB 138 e) PCB 153 f) PCB 180 g) Total PCB (60% Cl) Collected South of Madeira. Deep water (800-1200 m) habitat. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES
Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Fish, parrot
SPARISOMA (EUSCARUS) CRETENSE

Tissue	Cases Exposure Route	Range	Mean	General Information
6678 Liver	1	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable	a) 2 mg/kg b) 2 mg/kg c) 6 mg/kg d) 16 mg/kg e) 12 mg/kg f) 9 mg/kg g) 112 mg/kg Lipid basis	a) PCB 28 b) PCB 52 c) PCB 101 d) PCB 138 e) PCB 153 f) PCB 180 g) Total PCB (60% Cl) Collected from local fish market on Porto Santo, east of Madeira. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, scorpion
SCORPAENA SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
6679 Liver	1	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable	a) <0.1 mg/kg b) <0.1 mg/kg c) 3 mg/kg d) 18 mg/kg e) 15 mg/kg f) 10 mg/kg g) 114 mg/kg Lipid basis	a) PCB 28 b) PCB 52 c) PCB 101 d) PCB 138 e) PCB 153 f) PCB 180 g) Total PcB (60% Cl) Compound analyzed. Collected off Northern Coast of Sao Miguel, Azores. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Flicker, Northern
COLAPTES AURATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6680 Carcass	14	Not detected-0.75 ppm Wet wt	0.37+/-0.37 ppm S.E. Wet wt Arithmetic	Detected in 1 of 2 composite samples. Nonmigratory omnivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Flounder
PLATICHTHYS FLESUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6681 Liver	a) 10 b) 10	a) 5-290 ug/kg b) Not detected-60 ug/kg Wet wt	a) 133+/-79 ug/kg b) 30+/-19 ug/kg Wet wt	a) 1977 b) 1982 Year of collection in Sogndalfjord. Limit of detection 5 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 *Archives of Environmental Contamination and Toxicology* 14:33-41				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Frog
RANA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6682 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.10 ppm. Louisiana GC-EC
6683 Muscle	25	a) Not given b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0.017 ppm b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.10 ppm. Mean a) exceeded by S.E. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Gar, spotted
LEPISOSTEUS OCULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6684 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) Not detected b) Not detected c) Not detected d) 0.16 ug/g e) Not detected f) Not detected g) Not detected h) 1.04 ug/g Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Lake Fausse Point c) 3 from Little Pigeon Bayou d) 1 from Grand Lake e) 2 from Henderson Lake f) 1 from Bayou Petite Prairie g) 1 from Spring Bayou h) 1 from Raccouri Old River Collected 6/81, 1.6-12.9% lipids, wt 303-860 g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Goose, Canada
BRANTA CANADENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6685 *Adipose*	9	0.63-15.0 ug/g Wet wt	4.26 ug/g Wet wt	Collected 6/2 and 6/7/82. Adults, 4.43-6.14 kg, died of parathion poisoning. New York, Great South Bay GC-EC
6686 Liver	9	Not applicable	0.08 ug/g Wet wt	Collected 6/2/82. Adult, 5.68 kg, died of parathion poisoning. New York, Great South Bay GC-EC
6687 Muscle	9	0.05-0.33 ug/g Wet wt	0.11 ug/g Wet wt	Breast. Collected 6/2 and 6/7/82. Adults, 4.43-6.14 kg, died of parathion poisoning. New York, Great South Bay GC-EC

ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL
Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18

Grebe, western
AECHMOPHORUS OCCIDENTALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6688 Eggs	12	Not detected-11.0 ppm Wet wt	2.21 ppm Wet wt Geometric	Collected 1981. Detected in 11/12. Detection limit 0.5 ppm. California, Tule Lake National Wildlife Refuge GLC

ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; EGGS; BODY; BRAIN; DDT; DDE; CALIFORNIA; DIELDRIN; WATERFOWL; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; BIOLOGICAL MONITORING; COMPARATIVE EVALUATIONS; CHLORINE ORGANIC COMPOUNDS; PESTICIDES
Boellstorff, D.E.; Ohlendorf, H.M.; Anderson, D.W.; O'Neill, E.J.; Keith, J.O.; Prouty, R.M. 1985 Archives of Environmental Contamination and Toxicology 14:485-493

Greenshank, common
TRINGA NEBULARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6689 Muscle	5	0.21-2.00 ppm Wet wt	0.92+/-0.82 ppm Wet wt	Adults, mean wt 148+/-14 g. Shot 6/76-7/76. Sweden, Norrbotten, Gallivare GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Grouse, willow
LAGOPUS LAGOPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6690 Muscle	13	Not detected	Not detected	Adults, mean wt 564+/-34 g. Shot 6/76-7/76 and 6/77-9/77. Detection limit 300 pg. Sweden, Norrbotten, Gallivare GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Guillemot, common
URIA AALGE

Tissue	Cases Exposure Route	Range	Mean	General Information
6691 Eggs	a) 10 b) 9 c) 7 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 0.64+/-0.18 ug/g b) 0.70+/-0.29 ug/g c) 0.36+/-0.12 ug/g d) 0.79+/-0.34 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Tissue	Cases Exposure Route	Range	Mean	General Information
6692 Eggs		450-90 mg/kg Fat wt basis Range of means	Not given	Collected from an island, Stora Karlso, in Baltic proper, 1968-85. Guillemots feed on herring and stay in the Baltic all year. Nesting island is remote from local pollution discharges. Maximum to minimum, decreasing during study period. Estimated from graph. Sweden
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MUSCLES; BIRDS; EGGS; SWEDEN; POLYCHLORINATED BIPHENYLS; DDE; DDT; TREND MONITORING Olsson, M.; Reutergardh, L. 1986 Ambio 15(2):103-109				

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, common black-headed
LARUS RIDIBUNDUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6693 Muscle	a) 7 b) 8	a) 0.31-5.70 ppm b) 0.24-4.50 ppm Wet wt	a) 1.89+/-1.76 ppm b) 1.21+/-1.64 ppm Wet wt	a) Gallivare, Norrbotten, adults, mean wt 263+/-28 g b) Vaxjo, Vastergotland, 6 adults, 2 juveniles, mean wt 261+/-39 g Shot 6/76-7/76. Sweden GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6694 Blood	6	a) 16-154 ppm b) 0.2-1.1 ppm	a) 52 ppm b) 0.4 ppm	a) Lipid basis b) Fresh wt From pre-fledglings collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Knife Island GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320				

Tissue	Cases Exposure Route	Range	Mean	General Information
6695 Eggs	a) 9 b) 11 c) 13 d) 10	a) Not given b) Not given c) Not given d) Not given	a) 4.31+/-2.56 ug/g b) 3.81+/-1.15 ug/g c) 1.82+/-1.52 ug/g d) 7.07+/-4.66 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6696 Eggs		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 6.09 ppm b) 40.0 ppm c) 34.9 ppm d) 76.5 ppm e) 64.1 ppm f) 94.4 ppm Wet wt	a) Kent Island, Bay of Fundy b) Agawa Rock, Lake Superior c) Chantry Island, Lake Huron d) Presqu'ile, Lake Ontario e) Channel-Shelter Island, Saginaw Bay f) Fighting Island, Detroit River Pooled homogenates from 15-25 eggs. Collected 1981. Equal parts 1254 and 1260. Great Lakes, Atlantic Ocean GC
ENVIRONMENTAL EXPOSURE; AQUATIC; EGGS; GREAT LAKES; WATER POLLUTION; PESTICIDES; BIRDS; HEXACHLOROBENZENE; HEPTACHLOR EPOXIDE; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; DIELDRIN; OXYCHLORDANE Ellenton, J.A.; Brownlee, L.J.; Hollebone, B.R. 1985 Environmental Toxicology and Chemistry 4:615-622				

Tissue	Cases Exposure Route	Range	Mean	General Information
6697 Eggs				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Tissue	Cases Exposure Route	Range	Mean	General Information
6698 Eggs	10	3.9-17.6 ppm Fresh wt	11.3 ppm Fresh wt	Collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Knife Island GC
6699 Muscle		a) 4-68 ppm b) 0.2-3.3 ppm c) 8-167 ppm d) 0.5-6.9 ppm	a) 34 ppm b) 1.9 ppm c) 62 ppm d) 3.1 ppm	a) Pre-fledge, lipid basis, 10 cases b) Samples in a, fresh wt c) Post-fledge, lipid basis, 4 cases d) Samples in c), fresh wt Collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Knife Island GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Gull, laughing
LARUS ATRICILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6700 Carcass	a) 10 b) 10	a) 1.5-4.6 ppm b) 1.7-11 ppm Wet wt	a) 5.92 ppm b) 2.5 ppm Wet wt Geometric mean	a) 1980 b) 1981 Shot with steel shot at Atkinson Island, Little Pelican Island, and South Deer Island. Carcasses analyzed did not include skin, bills, feet, gastrointestinal tracts, livers, or kidneys. Mean for a) is geometric. Texas, Galveston Bay CC; GLC-EC
6701 Eggs	a) 20 b) 20	a) 0.7-8.5 ppm b) 0.6-7.8 ppm	a) 2.12 ppm b) 1.53 ppm Wet wt Geometric mean	a) 1980 b) 1981 Collected from nests early each nesting season. Texas, Galveston Bay CC; GLC-EC
BIRDS; TEXAS; CHLORINE ORGANIC COMPOUNDS; ENVIRONMENTAL EXPOSURE; AQUATIC; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDD; DDE; DIELDRIN; STYRENES; PESTICIDE RESIDUES; WATER POLLUTION; EGGS; BODY King, K.A.; Krynitsky, A.J. 1986 Archives of Environmental Contamination and Toxicology 15:367-376				

Gull, ring-billed
LARUS DELAWARENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6702 Blood	9	a) Not detected-36 ppm b) Not detected-0.2 ppm	a) 18 ppm b) 0.1 ppm	a) Lipid basis b) Fresh wt From pre-fledglings collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Duluth-Superior Harbor GC
6703 Eggs	10	Not detected-17.4 ppm Fresh wt	5.5 ppm Fresh wt	Collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Duluth-Superior Harbor GC
6704 Muscle		a) 7-15 ppm b) 0.4-1.0 ppm c) 43-49 ppm d) 2.7-3.4 ppm	a) 11 ppm b) 0.6 ppm c) 46 ppm d) 3 ppm	a) Pre-fledge, lipid basis, 10 cases b) Samples in a, fresh wt c) Post-fledge, lipid basis, 2 cases d) Samples in c), fresh wt Collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Duluth-Superior Harbor GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Haddock
MELANOGRAMMUS AEGLEFINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6705 Liver	a) 9 b) 7	a) 260-1050 ug/kg b) 131-422 ug/kg Wet wt	a) 559+/-257 ug/kg b) 352+/-126 ug/kg Wet wt	a) 1977 b) 1982 Year collected from Sogndalsfjord. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Hare, brown
LEPUS CAPENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6706 Liver	5	0.04-0.16 ppm Wet wt	0.067 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
6707 Muscle	5	0.03-0.08 ppm Wet wt	0.047 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Hawk, Cooper's
ACCIPITER COOPERII

Tissue	Cases Exposure Route	Range	Mean	General Information
6708 Brain	1	Not applicable	0.32 ug/g Wet wt	Collected 1/1/75. Florida, Duval County GC-EC

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Hawk, Cooper's
ACCIPITER COOPERII

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6709 Liver	1	Not applicable	2.00 ug/g Wet wt	Collected 1/1/75. Florida, Duval County GC-EC
6710 Muscle	1	Not applicable	1.50 ug/g Wet wt	Collected 1/1/75. Florida, Duval County GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Hawk, red-shouldered
BUTEO LINEATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6711 Brain	6	0.28-2.70 ug/g Wet wt	1.18 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1974-81. Mean calculated by extractor. Wt 360-500 g. Florida GC-EC
6712 Liver	5	0.25-3.50 ug/g Wet wt	1.63 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1974-81. Mean calculated by extractor. Wt 360-500 g. Florida GC-EC
6713 Muscle	6	0.13-7.90 ug/g Wet wt	1.69 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1974-81. Mean calculated by extractor. Wt 360-500 g. Florida GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Hawk, red-tailed
BUTEO JAMAICENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6714 Adipose	1	Not applicable	1.60 ug/g Wet wt	Juvenile, collected 12/28/74. Wt 1130 g. Florida, Alachua County GC-EC

(next page)

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Hawk, red-tailed
BUTEO JAMAICENSIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6715 Brain	2	0.08-0.14 ug/g Wet wt	0.11 ug/g Wet wt	Collected 12/74-1/75, wt 1130-1220 g. Mean calculated by extractor. Florida, Alachua County GC-EC
6716 Liver	2	0.10-0.34 ug/g Wet wt	0.22 ug/g Wet wt	Collected 12/74-1/75, wt 1130-1220 g. Mean calculated by extractor. Florida, Alachua County GC-EC
6717 Muscle	2	0.11-0.15 ug/g Wet wt	0.13 ug/g Wet wt	Collected 12/74-1/75, wt 1130-1220 g. Mean calculated by extractor. Florida, Alachua County GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Hawk, sharp-shinned
ACCIPITER STRIATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6718 Adipose	2	2.50-6.30 ug/g Wet wt	4.40 ug/g Wet wt	Adults, collected 12/71-10/74, wt 110 g. Mean calculated by extractor. Florida GC-EC
6719 Brain	1	Not applicable	0.05 ug/g Wet wt	Adult, wt 110 g, collected 10/24/74. Florida, Pinellas County GC-EC
6720 Liver	2	0.23-0.33 ug/g Wet wt	0.28 ug/g Wet wt	Adults, collected 12/71-10/74, wt 110 g. Mean calculated by extractor. Florida GC-EC
6721 Muscle	2	0.26-0.56 ug/g Wet wt	0.41 ug/g Wet wt	Adults, collected 12/71-10/74, wt 110 g. Mean calculated by extractor. Florida GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE: DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Hedgehog
ERINACEUS EUROPAEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6722 Muscle	5	0.06-0.13 ppm Wet wt	0.106 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Heron, black-crowned night
NYCTICORAX NYCTICORAX

Tissue	Cases Exposure Route	Range	Mean	General Information
6723 Body		19-115 mg/kg	Not given	Green Bay, 1978 Wisconsin CC; EC
FISHES; BIRDS; ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; EGGS; WISCONSIN; GREAT LAKES; BIOMAGNIFICATION; POLYCHLORINATED DIBENZOFURANS; POLYCHLORINATED DIBENZODIOXINS; POLYCHLORINATED BIPHENYLS Stalling, D.L.; Norstrom, R.J.; Smith, L.M.; Simon, M. 1985 Chemosphere 14(6/7):627-643				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Heron, black-crowned night
NYCTICORAX NYCTICORAX

Tissue	Cases Exposure Route	Range	Mean	General Information
6724 Brain	a) 1 b) 3 c) 1	a) Not applicable b) 0.96-5.4 ppm c) Not applicable Wet wt	a) 30.0 ppm b) 2.95 ppm c) 2.0 ppm Wet wt	a) Wisconsin, adult, 8/78 b) Nevada, adults, 7/75 (possible DDE poisoning, 1 bird) c) New Mexico, dead chick, 6/77 Part of large study of organochlorines and mortality in herons. Mean in b) calculated by extractor. Detection limit 0.5 ppm. GLC
6725 Carcass	a) 1 b) 3 c) 5 d) 1 e) 1 f) 3 g) 1	a) Not applicable b) 0.78-6.50 ppm c) Not detected d) Not applicable e) Not applicable f) 1.0-1.3 ppm g) Not applicable Wet wt	a) 6.3 ppm b) 3.76 ppm c) Not detected d) 15.0 ppm e) 110.0 ppm f) 1.2 ppm g) 3.0 ppm Wet wt	a) Massachusetts, adult, possible paralytic shellfish poisoning, 9/72 b) Vermont, fledged immatures shot 8/70 c) Alabama, fledged immatures shot 7/70 d) Michigan, adult shot 5/70 e) Wisconsin, adult, 8/78 f) Nevada, adults, 7/75 (possible DDE poisoning, 1 bird) g) New Mexico, dead chick, 6/77 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. Means in b) and f) calculated by extractor. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Tissue	Cases Exposure Route	Range	Mean	General Information
6726 Eggs	a) 10 b) 10 c) 10	a) Not detected-20 ppm b) Not detected-1.2 ppm c) Not detected-0.95 ppm Wet wt	a) 1.0 ppm b) 0.21 ppm c) 0.73 ppm Geometric Wet wt	a) Controls, Corpus Christi, TX b) Loving, NM c) Artesia, NM Collected 6, 7/83. Part of study to determine extent of residues in selected wildlife and source of contamination. Detection limit 0.5 ppm. Texas; New Mexico GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; REPTILES; WATERFOWL; BATS; DDE; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; TEXAS; NEW MEXICO; CARCASS; EGGS

White, D.H.; Krynitsky, A.J. 1986 Archives of Environmental Contamination and Toxicology 15:149-157

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Heron, black-crowned night
NYCTICORAX NYCTICORAX

Tissue	Cases Exposure Route	Range	Mean	General Information
6727 Eggs	12	0.8-52.0 ppm Wet wt	4.1 ppm Wet wt Geometric	Collected from 12 nests 6/10-14/83. Negative correlation existed between embryonic wt and log-transformed PCB residues in eggs from same nest. Controls collected from Patuxent Wildlife Research Center. California, San Francisco Bay National Wildlife Refuge Crown-rump length and femur length were shorter in study embryos than in controls. GLC; EC
BIRDS; EGGS; POLYCHLORINATED BIPHENYLS; DDE; WATER POLLUTION; CALIFORNIA; ENVIRONMENTAL EXPOSURE; ANIMAL POPULATIONS Hoffman, D.J.; Rattner, B.A.; Bunck, C.M.; Krynitsky, A.; Ohlendorf, H.M.; Lowe, R.W. 1986 Journal of Toxicology and Environmental Health 19:383-391				

Heron, great blue
ARDEA HERODIAS

Tissue	Cases Exposure Route	Range	Mean	General Information
6728 Brain	a) 3 b) 3 c) 3 d) 1 e) 1 f) 3 f) 14 h) 3	a) 2.5-36.0 ppm b) 0.78-93.0 ppm c) 4.1-80.0 ppm d) Not applicable e) Not applicable f) Not detected g) Not detected-54.0 ppm h) 56.0-220.0 ppm Wet wt	a) 15.3 ppm b) 49.9 ppm c) 29.6 ppm d) 130.0 ppm e) 1.3 ppm f) Not detected g) Not applicable h) 120.3 ppm Wet wt	a) Maryland, adult and fledged immatures, 6/70-8/73 b) Virginia, adults, possible dieldrin poisoning (2 birds), 1970-5/74 c) Florida, adults and fledged immature, possible dieldrin poisoning (1 bird), 2/73 d) North Carolina, adult, DDT poisoning, 2/76 e) Illinois, adult, dieldrin poisoning, 6/77 f) Michigan, adult and fledged immatures shot 8/73 g) Minnesota, adults, chicks and immature, dieldrin (3 birds) and endrin (1) poisoning, 4/72-6/76 h) Wisconsin, adults, possible dieldrin (1 bird) and endrin (1) poisoning, 12/76-5/79 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. Mean in a)-c), h) calculated by extractor. GLC
6729 Carcass	a) 2 b) 6 c) 5 d) 3 e) 1 f) 7 g) 15 h) 1	a) 0.60-0.90 ppm b) 0.68-69.0 ppm c) 0.78-45.0 ppm d) 3.0-22.0 ppm e) Not applicable f) Not detected-120.0 ppm g) Not detected-30.0 ppm h) Not applicable Wet wt	a) 0.75 ppm b) 20.35 ppm c) 15.72 ppm d) 10.33 ppm e) 3.2 ppm f) Not applicable g) Not applicable h) 15.0 ppm Wet wt	a) Vermont, fledged immatures shot 8/70 b) Maryland, adults and fledged immatures collected 7/66-8/73 c) Virginia, adults, 1970-1/76 d) Florida, adults and fledged immature, 2/73 e) Illinois, adult, dieldrin poisoning, 6/77 f) Michigan, adults and fledged immatures shot 5/70, 8/73 g) Minnesota, adults, immature and chicks, dieldrin (3 birds) and endrin (1) poisoning, 4/72-6/76 h) Wisconsin, adult, 5/78 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. Mean in a)-d) calculated by extractor. GLC
BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Heron, green-backed
BUTORIDES STRIATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6730 Carcass	a) 1 b) 6 c) 4	a) Not applicable b) Not detected c) 0.60-9.50 ppm Wet wt	a) 0.65 ppm b) Not detected c) 3.23 ppm Wet wt	a) Massachusetts, adult, possible paralytic shellfish poisoning, 9/72 b) Maryland, chicks, 6/69 c) Alabama, adults and fledged immatue shot 7/70 Part of large study of organochlorines and mortality in herons. Detection limit of 0.5 ppm. Mean in c) calculated by extractor. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Heron, little blue
FLORIDA CAERULEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6731 Carcass	a) 6 b) 1	a) Not detected-0.58 ppm b) Not detected Wet wt	a) Not detected b) Not detected Wet wt	a) Alabama, fledged immatures shot 7/70 b) Louisiana, fledged immature, 7/71 Part of large study of organochlorines and mortality in herons. Detection limit 0.5 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Heron, Louisiana
HYDRANASSA TRICOLOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6732 Carcass	a) 2 b) 1	a) Not detected b) Not detected	a) Not detected b) Not detected	a) Alabama, fledged immatures shot 7/70 b) Louisiana, fledged immature, 7/71 Part of large study of organochorines and mortality in herons. Detection limit 0.5 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES

Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Heron, yellow-crowned night
NYCTANASSA VIOLACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6733 Body, whole	10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.071 ppm b) 0.235 ppm c) 0.085 ppm d) 0.057 ppm e) 0.071 ppm f) 0.675	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Limit of detection 0.10 ppm. Means exceeded by S.E. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION
Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Tissue	Cases Exposure Route	Range	Mean	General Information
6734 Carcass	3	Not detected	Not detected	Alabama, adult and fledged immatures shot 7/70. Part of large study of organochorines and mortality in herons. Detection limit 0.5 ppm. GLC

BODY; BRAIN; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ALABAMA; CALIFORNIA; FLORIDA; ILLINOIS; LOUISIANA; MARYLAND; MASSACHUSETTS; MICHIGAN; MINNESOTA; NEBRASKA; NEVADA; NEW MEXICO; VERMONT; VIRGINIA; WISCONSIN; ADULTS; JUVENILES; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDD; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; INSECTICIDES; NONACHLOR; PESTICIDES; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; PESTICIDE RESIDUES
Ohlendorf, H.M.; Swineford, D.M.; Locke, L.N. 1981 Pesticides Monitoring Journal 14(4):125-135

Herring, Baltic
CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6735 Muscle	a) 25/yr b) 25/yr c) 15-20/yr d) 15-20/yr e) 15-20/yr	a) 12-2.7 mg/kg b) 19.5-5.4 mg/kg c) 7.1-1.5 mg/kg d) 4.7-2 mg/kg e) 8.3-1.2 mg/kg Fat wt basis Ranges of means	a) Not given b) Not given c) Not given d) Not given e) Not given	a) Collected June 1972-84 from southern Bothnian Sea (Angskarsklubb) b) Same as a), from southern Baltic proper (archipelago outside Karlskrona c) Collected autumn (Sep-Nov) 1969-71 (date published previously) and 1976-84 from Bothnian Bay (Harufjarden) d) Same as c), from southern Bothnian Sea e) Same as c), from southern Baltic proper Maximum to minimum, generally decreasing during the study period. Fish were younger than 4 yr. Some values estimated from graph. Sweden

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MUSCLES; BIRDS; EGGS; SWEDEN; POLYCHLORINATED BIPHENYLS; DDE; DDT; TREND MONITORING
Olsson, M.; Reutergardh, L. 1986 Ambio 15(2):103-109

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Jay, Steller's
CYANOCITTA STELLERI

Tissue	Cases Exposure Route	Range	Mean	General Information
6736 Carcass	26	0.23-0.49 ppm Wet wt	0.18+/-0.12 ppm S.E. Wet wt Arithmetic	Detected in 2 of 4 composite samples. Nonmigratory omnivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico; Colorado GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Kestrel, American
FALCO SPARVERIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6737 Brain	17	0.49-15.00 ug/g Wet wt	3.16 ug/g Wet wt	Dead or moribund insectivorous raptors collected 1971-77. 3 of 17 not analyzed. Mean calculated by extractor for 14/17. Wt 80-108 g. Florida GC-EC
6738 Liver	15	1.10-21.00 ug/g Wet wt	6.78 ug/g Wet wt	Dead or moribund insectivorous raptors collected 1971-75. Mean calculated by extractor. Wt 80-103 g. Florida GC-EC
6739 Muscle	15	1.00-28.00 ug/g Wet wt	8.07 ug/g Wet wt	Dead or moribund insectivorous raptors collected 1971-75. Mean calculated by extractor. Wt 80-103 g. Florida GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Killdeer
CHARADRIUS VOCIFERUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6740 Carcass	a) 19 b) 66	a) 0.19-1.67 ppm b) 0.17-0.64 ppm Wet wt	a) 0.47+/-0.12 ppm b) 0.27+/-0.10 ppm S.E. Wet wt Arithmetic	a) Detected in 11/19 individuals b) Detected in 5/7 composite samples Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. Utah; Oregon; Montana; Colorado GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Kingbird, Western
TYRANNUS VERTICALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6741 Carcass	10	Not applicable	0.22 ppm Wet wt	Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Detected in 1 composite samples that excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Kittiwake, black-legged
RISSA TRIDACTYLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6742 Eggs	a) 11 b) 10 c) 10	a) Not given b) Not given c) Not given	a) 1.35+/-0.94 ug/g b) 1.59+/-0.89 ug/g c) 1.90+/-0.05 ug/g Wet wt	a) East Finnmark b) West Finnmark c) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Lapwing
VANELLUS VANELLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6743 Muscle	2	0.07-0.25 ppm Wet wt	0.16+/-0.13 ppm Wet wt	Juveniles, mean wt 205+/-7 g. Shot 7/76. Sweden, Vastergotland, Vanersborg GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Lynx, pardel
LYNX PARDINA

Tissue	Cases Exposure Route	Range	Mean	General Information
6744 Liver	5	0.26-11.4 ppm Wet wt	1.726 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
6745 Muscle	5	0.09-0.53 ppm Wet wt	0.338 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MOLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION
Fernandez, M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Magpie, black-billed
PICA PICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6746 Brain	1	0.13-0.61 ug/g Wet wt	3.2 ug/g	From group found dead or dying, Umatilla National Wildlife Refuge, 1980. Oregon; Washington GLC

ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN
Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Meadowlark
STURNELLA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6747 Carcass	81	0.19-0.26 ppm Wet wt	0.06+/-0.04 ppm S.E. Wet wt Arithmetic	Detected in 2 of 8 composite samples. Nonmigratory omnivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico; Colorado; South Dakota; Wyoming; Idaho; Oregon; Montana GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Merganser, American
MERGUS MERGANSER

Tissue	Cases Exposure Route	Range	Mean	General Information
6748 Adipose	1	Not applicable	124 ug/g Wet wt	Collected 12/5/81. Juvenile, 1.23 kg, shot by hunter. New York, Hudson River GC-EC
6749 Muscle	1	Not applicable	6.3 ug/g Wet wt	Breast Collected 12/5/81. Juvenile, 1.23 kg, shot by hunter. New York, Hudson River GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Merganser, hooded
LOPHODYTES CACULLATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6750 Adipose	1	Not applicable	45.0 ug/g Wet wt	Collected 10/14/81. Juvenile, 0.58 kg, shot by hunter. New York, Hudson River GC-EC
6751 Muscle	1	Not applicable	1.6 ug/g Wet wt	Breast Collected 10/14/81. Juvenile, 0.58 kg, shot by hunter. New York, Hudson River GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Mouse, wood
APODEMUS SYLVATICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6752 Liver	6	0.31-0.84 ppm Wet wt	0.506 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.1 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
6753 Muscle	6	0.08-0.85 ppm Wet wt	0.256 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.1 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION
Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6754 Body, whole	a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10 j) 10	0.049+/-0.030-0.115+/-0.025 ppm Wet wt Range of means	a) 0.049+/-0.030 ppm b) 0.068+/-0.018 ppm c) 0.084+/-0.042 ppm d) 0.098+/-0.051 ppm e) 0.067+/-0.025 ppm f) 0.087+/-0.025 ppm g) 0.067+/-0.020 ppm h) 0.115+/-0.025 ppm i) 0.053+/-0.027 ppm j) 0.057+/-0.015 ppm Wet wt	a) Thames River b) Connecticut River c) Hammonasset d) New Haven Harbor e) Milford Harbor f) Housatonic River g) Stratford Point h) Bridgeport i) Norwalk Harbor j) Cos Cob Harbor Collected 9/83. Levels low relative to USFDA limit of 5 ppm in seafood for humans. Connecticut GLC

BODY; MUSSELS; AQUATIC; ENVIRONMENTAL EXPOSURE; CONNECTICUT; CADMIUM; COPPER; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION
Greig, R.A.; Sennefelder, G. 1985 Bulletin of Environmental Contamination and Toxicology 35:331-334

Biphenyl, chloro (8 Cl); 1,1'-Bi, ...ayl), chloro derivs (8 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Osprey
PANDION HALIAETUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6756 Adipose	2	1.00-1.20 ug/g Wet wt	1.10 ug/g Wet wt	Adults, collected 1974, 1160-1280 g. Mean calculated by extractor. Florida GC-EC

FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PEST... RESIDUES; PESTICIDES
Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 ... Journal of Wildlife Diseases 22(1):71-82

Tissue	Cases Exposure Route	Range	Mean	General Information
6756 Body				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to ... eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay

ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS
Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf

Tissue	Cases Exposure Route	Range	Mean	General Information
6757 Brain	2	0.05-0.50 ug/g Wet wt	0.28 ug/g Wet wt	Adults, collected 1974, 1160-1280 g. Mean calculated by extractor. Florida GC-EC

FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES
Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82

Tissue	Cases Exposure Route	Range	Mean	General Information
6758 Eggs	7	800-5600 ng/g Wet wt	2902+/-2060 ng/g Wet wt	Collected in 1980-1982. Finland GC-EC

BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE
Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Osprey
PANDION HALIAETUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6759 Eggs				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Tissue	Cases Exposure Route	Range	Mean	General Information
6760 Liver	2	0.06-0.43 ug/g Wet wt	0.25 ug/g Wet wt	Adults, collected 1974, 1160-1280 g. Mean calculated by extractor. Florida GC-EC
6761 Muscle	2	0.18-0.32 ug/g Wet wt	0.25 ug/g Wet wt	Adults, collected 1974, 1160-1280 g. Mean calculated by extractor. Florida GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Otter
LUTRA LUTRA

Tissue	Cases Exposure Route	Range	Mean	General Information
6762 Liver	8	2.8-232.0 mg/kg	54.5 mg/kg Fat wt	From group of 15, 6 with undetectable levels (limits not given) and 1 with trace level. Collected from various sites throughout Britain between 12/82 and 3/85. Mean calculated by extractor. Great Britain GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; OTTERS; LIVER; MUSCLES; KIDNEYS; EMBRYOS; POLYCHLORINATED BIPHENYLS; LINDANE; DIELDRIN; DDE; DDD; DDT; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; UNITED KINGDOM Mason, C.F.; Ford, T.C.; Last, N.I. Bulletin of Environmental Contamination and Toxicology 36:656-661				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Otter
LUTRA LUTRA

Tissue	Cases Exposure Route	Range	Mean	General Information
6763 Liver	5	2.40-2.45 ppm Wet wt	2.445 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Tissue	Cases Exposure Route	Range	Mean	General Information
6764 Muscle	9	3.6-300 mg/kg Fat wt	82.4 mg/kg Fat wt	From group of 14, 3 with undetectable levels (limits not given). Collected from various sites throughout Britain between 12/82 and 3/85. Mean calculated by extractor. Great Britain GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; OTTERS; LIVER; MUSCLES; KIDNEYS; EMBRYOS; POLYCHLORINATED BIPHENYLS; LINDANE; DIELDRIN; DDE; DDD; DDT; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; UNITED KINGDOM Mason, C.F.; Ford, T.C.; Last, N.I. Bulletin of Environmental Contamination and Toxicology 36:656-661				

Tissue	Cases Exposure Route	Range	Mean	General Information
6765 Muscle	5	0.66-1.63 ppm Wet wt	1.034 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Owl, barn-, common
TYTO ALBA

Tissue	Cases Exposure Route	Range	Mean	General Information
6766 Adipose	1	Not applicable	3.60 ug/g Wet wt	Collected 3/12/75. Adult, wt 400 g. Florida, Hillsborough County GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Tissue	Cases Exposure Route	Range	Mean	General Information
6767 Eggs				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Tissue	Cases Exposure Route	Range	Mean	General Information
6768 Liver	1	Not applicable	0.45 ug/g Wet wt	Collected 3/12/75. Adult, wt 400 g. Florida, Hillsborough County GC-EC
6769 Muscle	1	Not applicable	2.10 ug/g Wet wt	Collected 3/12/75. Adult, wt 400 g. Florida, Hillsborough County GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Owl, barred
STRIX VARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6770 Adipose	2	1.80-2.30 ug/g Wet wt	2.05 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1973-77. Mean calculated by extractor. Wt 662-860 g. Florida GC-EC
6771 Brain	3	Not detected-0.36 ug/g Wet wt	0.24 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1973-77. Mean calculated by extractor. Wt 450-860 g. Florida GC-EC
6772 Liver	5	0.17-64.00 ug/g Wet wt	13.15 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1973-77. Mean calculated by extractor. Wt 450-860 g. Florida GC-EC
6773 Muscle	5	0.04-15.00 ug/g Wet wt	3.09 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1973-77. Mean calculated by extractor. Wt 450-860 g. Florida GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Owl, great horned
BUBO VIRGINIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6774 Brain	2	2.50-12.00 ug/g Wet wt	7.25 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1973-74. Mean calculated by extractor. Wt 890-900 g. Florida GC-EC
6775 Liver	3	1.60-26.00 ug/g Wet wt	14.2 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1973-74. Mean calculated by extractor. Wt 700-900 g. Florida GC-EC
6776 Muscle	2	0.59-0.83 ug/g Wet wt	0.71 ug/g Wet wt	Dead or moribund omnivorous raptors collected 1973-74. Mean calculated by extractor. Wt 890-900 g. Florida GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Owl, screech-, Eastern
OTUS ASIO

Tissue	Cases Exposure Route	Range	Mean	General Information
6777 Brain	1	Not applicable	3.80 ug/g Wet wt	Dead or moribund insectivorous adult raptor collected 7/10/74. Wt 100 g. Florida, Alachua County GC-EC
6778 Liver	4	0.09-5.80 ug/g Wet wt	1.85 ug/g Wet wt	Dead or moribund insectivorous raptors collected 1974-75. Mean calculated by extractor. Wt 80-110 g. Florida, Hillsborough and Alachua Counties GC-EC
6779 Muscle	4	0.11-3.80 ug/g Wet wt	1.50 ug/g Wet wt	Dead or moribund insectivorous raptors collected 1974-75. Mean calculated by extractor. Wt 80-110 g. Florida, Hillsborough and Alachua Counties GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6780 Digestive diverticulum	a) 4 b) 4 c) 4 d) 4 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 5.3 ng/ml b) 4.5 ng/mg c) 3.9 ng/mg d) 2.6 ng/mg Dry wt	a) After 15 hr exposure to 12 ng/ml adsorbed on particles b) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene c) After 15 hr exposure to 10 ng/ml dissolved in the water d) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene Estimated from graph. South Carolina Scintillation counting
6781 Gills	a) 4 b) 4 c) 4 d) 4	a) Not given b) Not given c) Not given d) Not given	a) 4.4 ng/mg b) 5.2 ng/mg c) 5.2 ng/mg d) 4.4 ng/mg Dry wt	a) After 15 hr exposure to 12 ng/ml adsorbed on particles b) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene c) After 15 hr exposure to 10 ng/ml dissolved in the water d) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene Estimated from graph. Scintillation counting

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Oyster, American
CRASSOSTREA VIRGINICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6782 Labial palps	a) 4 b) 4 c) 4 d) 4	a) Not given b) Not given c) Not given d) Not given	a) 3.0 ng/mg b) 2.9 ng/mg c) 4.8 ng/mg d) 2.3 ng/mg Dry wt	a) After 15 hr exposure to 12 ng/ml adsorbed on particles b) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene c) After 15 hr exposure to 10 ng/ml dissolved in the water d) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene Estimated from graph. Scintillation counting
6783 Mantle	a) 4 b) 4 c) 4 d) 4	a) Not given b) Not given c) Not given d) Not given	a) 2.8 ng/mg b) 3.0 ng/mg c) 5.3 ng/mg d) 2.4 ng/mg Dry wt	a) After 15 hr exposure to 12 ng/ml adsorbed on particles b) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene c) After 15 hr exposure to 10 ng/ml dissolved in the water d) Same, plus 83.3 ng/ml naphthalene and 1.3 ng/ml [H-3]-benzopyrene Estimated from graph. Scintillation counting

GILLS; MANTLE; LABIAL PALPS; DIGESTIVE DIVERTICULA; DELIBERATE EXPOSURE; SHELLFISH; AQUATIC; POLYCHLORINATED BIPHENYLS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION

Fortner, A.R.; Sick, L.V. 1985 Bulletin of Environmental Contamination and Toxicology 34:256-264

Pelican, American white
PELECANUS ERYTHRORHYNCHOS

Tissue	Cases Exposure Route	Range	Mean	General Information
6784 Brain	a) 1 b) 1 c) 1 d) 1	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 2.9 ppm b) 6.3 ppm c) 6.7 ppm d) 0.50 ppm Wet wt	a) Found dead, 1976 b) 1978 c) 1980 d) 1980 California, Lower Klamath National Wildlife Refuge GLC
6785 Eggs	a) 10 b) 35	a) Not detected-1.0 ppm b) Not detected-1.1 ppm Wet wt	a) 0.52 ppm b) 0.32 ppm Wet wt Geometric	a) Collected 1969, detected in 4/10 b) Collected 1981, detected in 12/35 Detection limit 0.5 ppm. California, Klamath Basin National Wildlife Refuges GLC

ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; EGGS; BODY; BRAIN; DDT; DDE; CALIFORNIA; DIELDRIN; WATERFOWL; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; BIOLOGICAL MONITORING; COMPARATIVE EVALUATIONS; CHLORINE ORGANIC COMPOUNDS; PESTICIDES

Boellstorff, D.E.; Ohlendorf, H.M.; Anderson, D.W.; O'Neill, E.J.; Keith, J.O.; Prouty, R.M. 1985 Archives of Environmental Contamination and Toxicology 14:485-493

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Pelican, brown
PELECANUS OCCIDENTALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6786 Eggs	a) 23 b) 61 c) 33 d) 40	a) 1.90-13.80 ug/g b) 2.00-36.50 ug/g c) 1.70-18.60 ug/g d) 0.70-18.00 ug/g Wet wt	a) Not given b) Not given c) Not given d) Not given	a) Freshly laid, successful nest, mean 1971-72 was 4.34 ug/g, 1973, 4.23 ug/g, 1974, 8.82 ug/g, 1975, 11.92 ug/g b) Freshly laid, unsuccessful, mean 1971-72 was 9.06 ug/g, 1973, 6.46 ug/g, 1974, 10.63 ug/g, 1975, 7.21 ug/g c) Embryonated, successful, mean 1971-72 was 6.18 ug/g, 1973, 4.41 ug/g, 1974, 6.16 ug/g, 1975, 4.67 ug/g d) Embryonated, unsuccessful, mean 1971-72 was 6.67 ug/g, 1973, 3.96 ug/g, 1974, 6.09 ug/g, 1975, 6.37 ug/g Successful nest if >/=1 downy young survived long enough to leave nest. South Carolina GC-EC

BIRDS; AQUATIC; CHLORINE ORGANIC COMPOUNDS; EGGS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; DIELDRIN; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; ANIMAL POPULATIONS; PESTICIDES
Blus, L.J. 1982 Environmental Pollution (Series A) 28:15-33

Penguin, Adelie
PYGOSCELIS ADELIAE

Tissue	Cases Exposure Route	Range	Mean	General Information
6787 Adipose	a) 5 b) 5 c) 5 d) 5	a) 27.1-49.3 ng/g b) 27.3-89.7 ng/g c) 29.3-79.7 ng/g d) 37.9-99.9 ng/g Wet wt	a) 35.1 ng/g b) 47.5 ng/g c) 44.0 ng/g d) 54.6 ng/g Wet wt	a) Subcutaneous, males b) Abdominal, males c) Subcutaneous, females d) Abdominal, females. Subcutaneous burdens can be considered total body burdens. On starvation during breeding, levels increased in declining fat reserves with some redistribution to other tissues. Antarctica, Rumpa Island GC-EC

ADIPOSE TISSUE; BONES; BRAIN; LIVER; MUSCLES; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ANTARCTICA; SEX; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDE; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; POPULATION EXPOSURE; FOOD CONTAMINATION
Subramanian, A.; Tanabe, S.; Hidaka, H.; Tatsukawa, R. 1986 Environmental Pollution (Series A) 40:173-189

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Penguin, Adelie
PYGOSCELIS ADELIAE

Tissue	Cases Exposure Route	Range	Mean	General Information
6788 Adipose	1	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 79.7 ng/g b) 99.9 ng/g c) 107 ng/g d) 124 ng/g e) 29.6 ug f) 2.66 ug	a) Wet concentration in subcutaneous fat (SCF) of mother b) Wet concentration in abdominal fat (AF) c) Fat concentration in SCF d) Fat concentration in AF e) Burden in SCF f) Burden in AF Collected immediately after laying 1st egg on 11/22/81. Body wt 3850 g, total wt of SCF sample 371 g (fat content 277 g), total wt of AF sample 26.6 g (fat content 21.5 g)/. Total residueal amounts in e) and f) substantially represent whole body burden. Transfer rate from mother to egg was 2% per egg. Antarctica, Rumpa Island GC/MS

BIRDS; ENVIRONMENTAL EXPOSURE; POLYCHLORINATED BIPHENYLS; DDE; CHLORINE ORGANIC COMPOUNDS; ANTARCTICA; EGGS; ADIPOSE TISSUE; AQUATIC

Tanabe, S.; Subramanian, A.; Hidaka, H.; Tatsukawa, R. 1986 Chemosphere 15(3):343-351

Tissue	Cases Exposure Route	Range	Mean	General Information
6789 Bone	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 2.88 ng/g b) 4.58 ng/g c) 5.29 ng/g Wet wt	a) Mating period b) Egg-laying period c) Incubation period Starvation extended through a), b) and c), levels increased in declining fat reserves, and some redistribution to other tissues occured. Antarctica, Rumpa Island GC-EC
6790 Brain	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 0.36 ng/g b) 0.53 ng/g c) 0.80 ng/g Wet wt	a) Mating period b) Egg-laying period c) Incubation period Starvation extended through a), b) and c), levels increased in declining fat reserves, and some redistribution to other tissues occured. Antarctica, Rumpa Island GC-EC

ADIPOSE TISSUE; BONES; BRAIN; LIVER; MUSCLES; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ANTARCTICA; SEX; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDE; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; POPULATION EXPOSURE; FOOD CONTAMINATION

Subramanian, A.; Tanabe, S.; Hidaka, H.; Tatsukawa, R. 1986 Environmental Pollution (Series A) 40:173-189

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Penguin, Adelie
PYGOSCELIS ADELIAE

Tissue	Cases Exposure Route	Range	Mean	General Information
6791 Eggs	1	a) Not applicable b) Not applicable c) Not applicable	a) 19.6 ng/g b) 74.5 ng/g c) 0.65 ug	a) Wet concentration b) Fat concentration c) Whole egg burden (so regarded because white, membrane, and shell contained negligible fat) Yolk sample (wt 33.4 g, fat content 8.8 g) of egg collected immediately after being laid 11/22/81. Whole wt of egg was 142 g. Transfer rate from mother to egg was 2% per egg. Antarctica, Rumpa Island GC/MS

BIRDS; ENVIRONMENTAL EXPOSURE; POLYCHLORINATED BIPHENYLS; DDE; CHLORINE ORGANIC COMPOUNDS; ANTARCTICA; EGGS; ADIPOSE TISSUE; AQUATIC
Tanabe, S.; Subramanian, A.; Hidaka, H.; Tatsukawa, R. 1986 Chemosphere 15(3):343-351

Tissue	Cases Exposure Route	Range	Mean	General Information
6792 Liver	a) 1 b) 1	a) Not given b) Not given	a) 0.28 ng/g b) 0.83 ng/g Wet wt	a) Mating period b) Incubation period Starvation extended through a) and b), levels increased in declining fat reserves, and some redistribution to other tissue occurred. Antarctica, Rumpa Island GC-EC
6793 Muscle	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 0.18 ng/g b) 0.47 ng/g c) 0.74 ng/g Wet wt	a) Mating period b) Egg-laying period c) Incubation period Starvation extended through a), b) and c), levels increased in declining fat reserves, and some redistribution to other tissues occured. Antarctica, Rumpa Island GC-EC

ADIPOSE TISSUE; BONES; BRAIN; LIVER; MUSCLES; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ANTARCTICA; SEX; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; DDE; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; POPULATION EXPOSURE; FOOD CONTAMINATION
Subramanian, A.; Tanabe, S.; Hidaka, H.; Tatsukawa, R. 1986 Environmental Pollution (Series A) 40:173-189

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Perch, white
MORONE AMERICANA

Tissue	Cases Exposure Route	Range	Mean	General Information
6794 Eggs	1	Not applicable	0.33 ug/g	Collected Patapsco River, spring, 1976. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.01 ug/g. Value below established action level. Maryland, Chesapeake Bay and tributaries GC-EC
6795 Muscle	1	Not applicable	0.42 ug/g	Collected Patapsco River, spring, 1976. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.01 ug/g. Value below established action level. Maryland, Chesapeake Bay and tributaries GC-EC
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; MUSCLES; EGGS; GONADS; DDT; DDE; DDD; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M; Topping, J.J. 1985 Journal of Environmental Science and Health B20(6):729-742				

Perch, yellow
PERCA FLAVESCENS

Tissue	Cases Exposure Route	Range	Mean	General Information
6796 Body, whole				
REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE Eisler, R. 1984 Biological Trace Element Research 6:165-180				

Tissue	Cases Exposure Route	Range	Mean	General Information
6797 Body, whole	406	a) Not given b) Not given c) Not given	a) 8.40 ug/g b) 2.26 ug/g c) 0.90 ug/g	a) Green Bay, WI, 85 cases b) Little Lake Butte des Morts, WI, 100 cases c) Lake Erie, OH, 221 cases 1978-80. Wisconsin; Ohio Bilateral asymmetry
BODY; OVARIES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; OHIO; WISCONSIN; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; POPULATION EXPOSURE; BIOINDICATORS Carline, R.F.; Lawal, M.V. 1985 Environmental Toxicology and Chemistry 4:543-547				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Perch, yellow
PERCA FLAVESCENS

Tissue	Cases Exposure Route	Range	Mean	General Information
6798 Eggs	2	1.77-3.33 ug/g	2.55 ug/g	Collected Patapsco River, spring, 1976. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.01 ug/g. Value below established action level. Mean calculated by extractor. Maryland, Chesapeake Bay and tributaries GC-EC
6799 Muscle	2	0.18-0.29 ug/g	0.23 ug/g	Collected Patapsco River, spring, 1976. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.01 ug/g. Value below established action level. Mean calculated by extractor. Maryland, Chesapeake Bay and tributaries GC-EC

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; MUSCLES; EGGS; GONADS; DDT; DDE; DDD; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M; Topping, J.J. 1985 Journal of Environmental Science and Health B20(6):729-742

Tissue	Cases Exposure Route	Range	Mean	General Information
6800 Ovary				

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Tissue	Cases Exposure Route	Range	Mean	General Information
6801 Ovary		a) Not given b) Not given c) Not given d) Not given	a) 1.78 ug/g b) 0.18 ug/g c) 0.12 ug/g d) 0.13 ug/g	a) Lake Erie b) Wauseon Reservoir c) New London Reservoir d) Findlay Reservoir 1978. Ohio Bilateral asymmetry

BODY; OVARIES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; OHIO; WISCONSIN; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; POPULATION EXPOSURE; BIOINDICATORS

Carline, R.F.; Lawal, M.V. 1985 Environmental Toxicology and Chemistry 4:543-547

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Pigeon, wood
COLUMBA PALUMBUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6802 Muscle	10	Not detected	Not detected	Adults, mean wt 506+/-27 g. Shot 7/76. Detection limit 300 pg. Sweden, Vastergotland, Vanersborg GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6803 Body		a) Not applicable b) Not applicable	a) 6.58 mg/kg b) 63.14 mg/kg	a) Ashtabula River, OH, 10/28/81 b) Sheboygan River WI, 9/30/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Tissue	Cases Exposure Route	Range	Mean	General Information
6804 Liver	1	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable	a) 2 mg/kg b) 7 mg/kg c) 14 mg/kg d) 38 mg/kg e) 22 mg/kg f) 16 mg/kg g) 234 mg/kg Lipid basis	a) PCB 28 b) PCB 452 c) PCB 101 d) PCB 138 e) PCB 153 f) PCB 180 g) Total PCB (60% Cl) Compound analyzed. Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES
Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6805 Liver	a) 2 b) 1 c) 4	a) 20-33 mg/kg b) Not applicable c) 17-27 mg/kg Fat basis	a) 26 mg/kg b) 28 mg/kg c) 22 mg/kg Fat basis	a) Caught 1980, upper Viskan River near its source, 0.63% fat content b) Caught 1980-81, upper Viskan River near junction with Haggan River, 5.8% fat content c) Caught 1980-81, Haggan River, 0.52% fat content. Detection limit 0.1 mg/kg fat. Sweden GC/MS; GC-EC

SWEDEN; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; DDT; POLYCHLORINATED BIPHENYLS; BROMINATED HYDROCARBONS; WATER POLLUTION
Anderson, O.; Blomkvist, G. 1981 Chemosphere 10(9):1051-1060

Tissue	Cases Exposure Route	Range	Mean	General Information
6806 Muscle	a) 10-20/yr b) 10-20/yr	a) 2.9-0.6 mg/kg b) 5-1.4 mg/kg Fat wt basis Ranges of means	a) Not given b) Not given	a) Collected spring 1968-84 from Lake Storvindeln, a 55-sq km forest lake receiving no local pollution b) Collected spring 1967-84 from Lake Bolmen, a 184-sq km lake receiving minor industrial and agricultural pollution Maximum to minimum, generally decreasing during study period. Estimated from graph. Sweden

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MUSCLES; BIRDS; EGGS; SWEDEN; POLYCHLORINATED BIPHENYLS; DDE; DDT; TREND MONITORING
Olsson, M.; Reutergardh, L. 1986 Ambio 15(2):103-109

Tissue	Cases Exposure Route	Range	Mean	General Information
6807 Muscle	a) 5 b) 4	a) 7-14 mg/kg b) 6.7-9.2 mg/kg Fat basis	a) 10 mg/kg b) 8.0 mg/kg Fat basis	a) Caught 1980, upper Viskan River near its source, 0.63% fat content b) Caught 1980-81, Haggan River, 0.52% fat content. Sweden GC/MS; GC-EC

SWEDEN; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; DDT; POLYCHLORINATED BIPHENYLS; BROMINATED HYDROCARBONS; WATER POLLUTION
Anderson, O.; Blomkvist, G. 1981 Chemosphere 10(9):1051-1060

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Plover, golden-, greater
PLUVIALIS APRICARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6808 Muscle	5	0.09-0.28 ppm Wet wt	0.19+/-0.09 ppm Wet wt	Adults, mean wt 189+/-7 g. Shot 6/76-7/76. Sweden, Norrbotten, Gallivare GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Ptarmigan
LAGOPUS MUTUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6809 Muscle	8	Not detected	Not detected	Adults, mean wt 459+/-14 g. Shot 6/76-7/76. Detection limit 300 pg. Sweden, Norrbotten, Gallivare GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Puffin, Atlantic
FRATERCULA ARCTICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6810 Eggs	a) 11 b) 10 c) 10 d) 20	a) Not given b) Not given c) Not given d) Not given	a) 2.35+/-1.21 ug/g b) 1.55+/-0.69 ug/g c) 0.56+/-0.16 ug/g d) 0.80+/-0.30 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING
Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6811 Adipose	a) 4 b) 2 c) 2 d) 2 e) 4 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 161.48+/-40.91 dpm b) 15.87+/-2.30 dpm c) 24.49+/-1.48 dpm d) 14.24+/-0.87 dpm e) 185.04+/-22.53 dpm /100 mgX10(E+3) S.E.	a) Females, 24 hr after 25 uCi U-[14-C]-PCB b) 24 hr after 5 uCi c) 48 hr after 5 uCi d) 96 hr after 5 uCi e) Males, 24 hr after 25 uCi %'s of doses were, respectively, 0.29, 0.14, 0.22, 0.13, 0.34. Scintillation counting
6812 Adrenal gland	a) 4 b) 1 c) 1 d) 1 e) 4	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 63.68+/-29.61 ppm b) 3.09 dpm c) 2.20 dpm d) 2.95 dpm e) 20.95+/-4.18 dpm /100 mgX10(E+3) S.E.	a) Females, 24 hr after 25 uCi U-[14-C]-PCB b) 24 hr after 5 uCi c) 48 hr after 5 uCi d) 96 hr after 5 uCi e) Males, 24 hr after 25 uCi %'s of doses were, respectively, 0.12, 0.03, 0.02, 0.03, 0.04.
6813 Liver	a) 4 b) 2 c) 2 d) 2 e) 4 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 14.79+/-3.94 dpm b) 3.11+/-0.15 dpm c) 2.77+/-0.29 dpm d) 1.79+/-0.30 dpm e) 17.85+/-3.22 dpm /100 mgX10(E+3) S.E.	a) Females, 24 hr after 25 uCi U-[14-C]-PCB b) 24 hr after 5 uCi c) 48 hr after 5 uCi d) 96 hr after 5 uCi e) Males, 24 hr after 25 uCi %'s of doses were, respectively, 0.03, 0.03, 0.03 0.02, 0.03. Scintillation counting
6814 Ovary	a) 4 b) 2 c) 2 d) 2 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 64.42+/-14.64 dpm b) 13.70+/-3.16 dpm c) 11.04+/-3.66 dpm d) 5.76+/-1.42 dpm /100 mgX10(E+3) S.E.	a) 24 hr after 25 uCi U-[14-C]-PCB b) 24 hr after 5 uCi c) 48 hr after 5 uCi d) 96 hr after 5 uCi Counts for entire ovary including follicles. %'s of doses were, respectively, 0.12, 0.12, 0.10, 0.05. Scintillation counting
6815 Shell gland	a) 4 b) 2 c) 2 d) 2 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 1.47+/-0.09 dpm b) 0.78+/-0.24 dpm c) 0.39+/-0.12 dpm d) 0.17+/-0.03 dpm /100 mgX10(E+3) S.E.	a) 24 hr after 25 uCi U-[14-C]-PCB b) 24 hr after 5 uCi c) 48 hr after 5 uCi d) 96 hr after 5 uCi %'s of doses were, respectively, 2.67X10(E-3), 7.09X10(E-3), 3.55X10(E-3), 1.55X10(E-3). Scintillation counting
6816 Testis	4 Ingestion	Not given	1.86+/-0.26 dpm/100 mgX10(E+3) S.E.	24 hr after 25 uCi of U-[14-C]-PCB. 3.38+/-10(E-3)% of dose. Scintillation counting

DELIBERATE EXPOSURE; BIRDS; OVARIES; TESTES; SHELL GLAND; ADIPOSE TISSUE; ADRENAL GLANDS; LIVER; TERRESTRIAL; POLYCHLORINATED BIPHENYLS; SEX
Biessmann, A. 1981 Archives of Environmental Contamination and Toxicology 10:653-662

Biphenyl, chloro (8 CI); 1,1'-Biphenyl, chloro derivs (9 CI)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Rabbit
ORYCTOLAGUS CUNICULUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6817 Liver	5	0.07-0.17 ppm Wet wt	0.111 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
6818 Muscle	5	0.04-0.08 ppm Wet wt	0.059 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Raccoon
PROCYON LOTOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6819 Muscle	10	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Limit of detection 0.10 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Rat, brown
RATTUS NORVERGICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6820 Liver	5	0.60-0.66 ppm Wet wt	0.626 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
6821 Muscle	5	0.04-0.21 ppm Wet wt	0.087 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.10 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION
Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Razorbill
ALCA TORDA

Tissue	Cases Exposure Route	Range	Mean	General Information
6822 Eggs	9	Not given	2.22+/-1.46 ug/g Wet wt	Collected in West Finnmark, 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING
Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Redshank, spotted
TRINGA ERYTHROPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6823 Muscle	4	0.14-6.10 ppm Wet wt	2.00+/-2.78 ppm Wet wt	Adults, mean wt 131+/-11 g. Shot 6/76-7/76. Sweden, Norrbotten, Gallivare GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Redwing
TURDUS ILIACUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6824 Muscle	5	0.06-0.75 ppm Wet wt	0.22+/-0.30 ppm Wet wt	Adults, mean wt 59+/-9 g. Shot 6/76-7/76. Sweden, Norrbotten, Gallivare GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS

Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Robin, American
TURDUS MIGRATORIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6825 Carcass	146	0.06-0.14 ppm Wet wt	0.01+/-0.01 ppm S.E. Wet wt Arithmetic	Detected in 2 of 14 composite samples. Migratory omnivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico; Colorado; Utah; South Dakota; Idaho; Oregon; Montana; Wyoming GC-EC

CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES

DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693

Ruff
PHILOMACHUS PUGNAX

Tissue	Cases Exposure Route	Range	Mean	General Information
6826 Muscle	10	Not detected-0.05 ppm Wet wt	0.02+/-0.02 ppm Wet wt	Adults, mean wt 97+/-5 g. Shot 6/76-7/76. Detection limit 300 pg. Sweden, Norrbotten, Gallivare GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS

Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Salmon, Baltic
SALMO SALAR

Tissue	Cases Exposure Route	Range	Mean	General Information
6827 Eggs	a) 15 b) 3 c) 10	a) 73-414 ppb b) 106-263 ppb c) 65-263 ppb Wet wt	a) 236+/-97.1 ppb b) 168+/-83.5 ppb c) 164+/-73.6 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg egg fat 5.13-5.68%. Finland, Baltic Sea GC-EC
6828 Liver	a) 15 b) 3 c) 10	a) 43-462 ppb b) 25-145 ppb c) 36-147 ppb Wet wt	a) 129+/-106 ppb b) 66.0+/-68.4 ppb c) 85.9+/-37.7 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg liver fat 2.06-2.37%. Finland, Baltic Sea GC-EC
6829 Muscle	a) 14 b) 3 c) 10	a) 146-491 ng/g b) 199-464 ng/g c) 120-469 ng/g Wet wt	a) 333+/-115 ng/g b) 350+/-136 ng/g c) 240+/-116 ng/g Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg muscle fat 4.02-5.43% Finland, Baltic Sea GC-EC

FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES
Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740

Sandpiper, wood
TRINGA GLAREOLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6830 Muscle	5	0.04-0.08 ppm Wet wt	0.06+/-0.02 ppm Wet wt	Adults, mean wt 59+/-4 g. Shot 6/76-7/76. Sweden, Norrbotten, Gallivare GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Scorpion, sea
MYOXOCEPHALUS SCORPIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6831 Liver	a) 5 b) 6	a) 260-410 ug/kg b) 47-169 ug/kg Wet wt	a) 322+/-68 ug/kg b) 97+/-41 ug/kg Wet wt	a) 1977 b) 1982 Year collected from Sogndalsfjord. Limit of detection 2 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Seal, Arctic ringed
PHOCA HISPIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
6832 Adipose	a) 9 b) 15 c) 12 d) 16	a) Not given b) Not given c) Not given d) Not given	a) 1.83+/-0.82 ug/g b) 0.58+/-0.25 ug/g c) 3.69+/-1.34 ug/g d) 1.28+/-0.75 ug/g Wet wt	a) Females, 1972 b) Females, 1981 c) Males, 1972 d) Males, 1981 Samplings 5-6/72 and 3 and 5/81. Blubber. Calculated as Aroclor 1254: Significant differences: a), b) $p<0.01$ and c), d) $p<0.01$. Canada, NWT, Holman Island GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; ADIPOSE TISSUE; SEALS; POLYCHLORINATED BIPHENYLS; DDT; PESTICIDES; WATER POLLUTION; CANADA Addison, R.F.; Zinck, M.E.; Smith, T.G. 1986 Environmental Science and Technology 20:253-256				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Seal, gray
HALICHOERUS GRYPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6833 Adipose	a) 10 b) 9	a) 13.8-89.1 ug/g b) 4.1-37.6 ug/g Lipid wt	a) 44.67 ug/g b) 19.4 ug/g Lipid wt	a) 1-22 yr old males b) 6-31 yr old females Blubber lipid. Mean for both sexes was 32.6+/-21.1 ug/g Collected 11/72, during breeding season. Separate means calculated by extractor. 1.64 times PCB chlorine level determined by microwave plasma detection. England, Farne Islands GLC/microwave plasma detection
6834 Liver	a) 2 b) 2 c) 2 d) 2 e 2	a) 4.4-6.1 ug/g b) 5.6-10.2 ug/g c) 2.6-3.6 ug/g d) 7.5-9.8 ug/g e) 4.9-10.3 ug/g Lipid wt	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable	a) Fetus and 7 yr old mother with blubber level 8.9 ug/g b) Fetus and 12 yr old mother, blubber levels 17.9 ug/g c) Fetus and 13 yr old mother, blubber level 8.2 ug/g d) Fetus and 16 yr old mother, blubber level 13.9 ug/g e) Fetus and 37 yr old mother, blubber level 20.5 ug/g Collected during 11/72, during breeding season. 1.64 times PCB chlorine level determined by microwave plasma detection. England, Farne Islands GLC/microwave plasma detection
ENVIRONMENTAL EXPOSURE; SEALS; AQUATIC; ADIPOSE TISSUE; LIVER; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; FETUS; WATER POLLUTION; PESTICIDES; PESTICIDE RESIDUES; UNITED KINGDOM Donkin, P.; Mann, S.V.; Hamilton, E.I. 1981 Science of the Total Environment 19:121-142				

Shad
DOROSOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6835 Body, whole	25	a) Not given b) Not given c) Not given d) Not given e) Not applicable f) Not applicable	a) 0.228 ppm b) 0.422 ppm c) 0.318 ppm d) 1.126 ppm e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.1 ppm. Mean a) exceeded by S.E. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Shad, gizzard
DOROSOMA CEPEDIANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
6836 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) Not detected b) Not detected c) Not detected d) 0.07 ug/g e) Not detected f) Not detected g) Not detected h) 0.06 ug/g Wet wt Geometric	a) 3 composite samples from Lake Verret b) 3 from Lake Fausse Point c) 1 from Little Pigeon Bayou d) 3 from Grand Lake e) 3 from Henderson Lake f) 3 from Bayou Petite Prairie g) 3 from Spring Bayou h) 3 from Raccouri Old River Collected 6/81, 1.4-5.0% lipids, wt 60-227 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Shag
PHALACROCORAX ARISTOTELIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6837 Eggs	a) 10 b) 10	a) Not given b) Not given	a) 0.74+/-0.32 ug/g b) 0.42+/-0.18 ug/g Wet wt	a) East Finnmark b) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING
Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Shearwater, Cory's
CALONECTRIS DIOMEDEA

Tissue	Cases Exposure Route	Range	Mean	General Information
6838 Adipose	a) 5 b) 5 c) 5	a) Not given b) Not given c) Not given	a) 388.94+/-193.74 ug/g b) 48.09+/-17.16 ug/g c) 41.11+/-10.04 ug/g Dry wt	a) Majorca Island, Mediterranean, 5/84 b) Linosa Island, Mediterranean, 5/82 c) Crete Island, Mediterranean, 4/83 Adults. Calculated as Aroclor 1260. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6839 Brain	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.65+/-0.34 ug/g b) 12.07+/-6.17 ug/g c) 2.35+/-0.70 ug/g d) 1.45+/-0.57 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Calculated as Aroclor 1260. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6840 Eggs	a) 20 b) 10 d) 11 d) 2	a) Not given b) Not given c) Not given d) 7.96-20.81 ug/g Dry wt	a) 4.19+/-1.70 ug/g b) 95.08+/-56.72 ug/g c) 10.59+/-4.18 ug/g d) 14.39 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Calculated as Aroclor 1260. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6841 Kidney	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.59+/-0.38 ug/g b) 12.53+/-4.50 ug/g c) 1.83+/-0.54 ug/g d) 1.80+/-0.82 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Calculated as Aroclor 1260. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6842 Liver	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.78+/-0.48 ug/g b) 18.75+/-7.28 ug/g c) 3.37+/-2.95 ug/g d) 4.23+/-2.02 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Calculated as Aroclor 1260. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Shearwater, Cory's
CALONECTRIS DIOMEDEA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6843 Muscle	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 2.02+/-0.97 ug/g b) 44.72+/-16.74 ug/g c) 8.20+/-4.39 ug/g d) 5.81+/-3.28 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Calculated as Aroclor 1260. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC
6844 Uropygial gland	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 2.05+/-0.62 ug/g b) 45.5+/-11.38 ug/g c) 7.48+/-2.24 ug/g d) 5.66+/-2.17 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Calculated as Aroclor 1260. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples GC-EC

ENVIRONMENTAL EXPOSURE; BIRDS; ATLANTIC OCEAN; MEDITERRANEAN SEA; AQUATIC; EGGS; BRAIN; MUSCLES; KIDNEYS; LIVER; UROPYGIAL GLAND; ADIPOSE TISSUE; MERCURY; CADMIUM; LEAD; ZINC; SELENIUM; HEXACHLOROBENZENE; DDE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; WATER POLLUTION; METALS; PESTICIDES

Renzoni, A.; Focardi, S.; Fossi, C.; Leonzio, C.; Mayol, J. 1986 *Environmental Pollution (Series A)* 40:17-35

Shoveler
ANAS CLYPEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
6845 Adipose	1	Not applicable	8.8 ug/g Wet wt	Collected 10/14/81. Juvenile, 0.47 kg, shot by hunter. New York, Hudson River GC-EC
6846 Liver	1	Not applicable	0.21 ug/g Wet wt	Collected 10/14/81. Juvenile, 0.47 kg, shot by hunter. New York, Hudson River GC-EC
6847 Muscle	1	Not applicable	0.30 ug/g Wet wt	Breast Collected 10/14/81. Juvenile, 0.47 kg, shot by hunter. New York, Hudson River GC-EC

ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL

Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Skimmer, black
RYNCHOPS NIGER

Tissue	Cases Exposure Route	Range	Mean	General Information
6848 Body	a) 15 b) 15	a) Undetectable-10 ppm b) Undetectable-16 ppm Wet wt	a) 1.6 ppm b) 1.0 ppm Geometric means	a) Collected near Port Mansfield, TX, on 1/13/83 from a flock of 300 b) At Chachalacas, Veracrus on 1/2-4/83, flock of 50 Birds appeared in excellent physical condition. Samples with undetectable levels (1 in a), 4 in b)) were assigned 1/2 detection limit (0.10 ppm) for calculating geometric means. Texas; Mexico

BODY; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MEXICO; TEXAS; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; CHLORINATED HYDROCARBONS; DDE
White, D.H.; Mitchell, C.A.; Stafford, C.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:513-517

Tissue	Cases Exposure Route	Range	Mean	General Information
6849 Carcass	a) 10 b) 10 c) 10	a) 1.7-11 ppm b) 0.8-6 ppm c) 1.3-5.3 ppm Wet wt	a) 5.47 ppm b) 2.29 ppm c) 2.55 ppm Wet wt Geometric mean	a) 1980 b) 1981 c) 1982 Shot with steel shot at Atkinson Island, Little Pelican island, and near Swan Lake. Carcasses analyzed did not include skin, bills, feet, gastrintestinal tracts, livers, or kidneys. Texas, Galveston Bay CC; GLC-EC
6850 Eggs	a) 20 b) 20 c) 20	a) 2.4-10 ppm b) 0.5-10 ppm c) 1.0-12 ppm Wet wt	a) 4.18 ppm b) 2.30 ppm c) 2.65 ppm Wet wt Geometric mean	a) 1980 b) 1981 c) 1982 Collected from nests early each nesting season. Texas, Galveston Bay CC; GLC-EC

BIRDS; TEXAS; CHLORINE ORGANIC COMPOUNDS; ENVIRONMENTAL EXPOSURE; AQUATIC; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDD; DDE; DIELDRIN; STYRENES; PESTICIDE RESIDUES; WATER POLLUTION; EGGS; BODY
King, K.A.; Krynitsky, A.J. 1986 Archives of Environmental Contamination and Toxicology 15:367-376

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Snake, water
NATRIX sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6851 Body, whole	25	a) Not given b) Not applicable c) Not applicable	a) 0.110 ppm b) Not detected c) Not detected	a) Lake Verret b) Plaquemine-Brule Bayou c) East Franklin Site of collection in 1979. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.10 ppm. Mean a) exceeded by S.E. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Snipe, common
GALLINAGO GALLINAGO

Tissue	Cases Exposure Route	Range	Mean	General Information
6852 Muscle	5	Not detected-0.05 ppm Wet wt	0.03+/-0.02 ppm Wet wt	Adults, mean wt 98+/-7 g. Shot 6/76-7/76. Detection limit 300 pg. Sweden, Norrbotten, Gallivare GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Sole, lemon
MICROSTOMAS KITT

Tissue	Cases Exposure Route	Range	Mean	General Information
6853 Liver	a) 6 b) 10 c) 5	a) 30-290 ug/kg b) Not detected-54 ug/kg c) 120-250 ug/kg Wet wt	a) 172+/-90 ug/kg b) 37+/-15 ug/kg c) 184+/-62 ug/kg Wet wt	a) 1977, Sogndalsfjord b) 1982, Sogndalsfjord c) 1977, Dalsfjord Year and location of collection. Limit of detection 5 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Starling
STURNUS VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6854 Adipose	a) 13 b) 25 c) 25 d) 25 e) 49 f) 50 g) 28 h) 21 i) 24	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 4175+/-4542 ppb b) 3270+/-3359 ppb c) 1847+/-783 ppb d) 4310+/-7044 ppb e) 4879+/-8869 ppb f) 1200+/-751 ppb g) 3171+/-2288 ppb h) 1410+/-976 ppb i) 1438+/-857 ppb Fat basis	a) 1972 b) 1973 c) 1974 d) 1975 e) 1978 f) 1979 g) 1981 h) 1982 i) 1983 Years collected from nests, immediately prior to flight. Detection limit 0.5 ng/g (ppb). Finland GC-EC
6855 Muscle	a) 13 b) 25 c) 25 d) 25 e) 49 f) 49 g) 28 h) 21 i) 24	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 124.6+/-130.7 ppb b) 84.4+/-83.7 ppb c) 44.0+/-19.1 ppb d) 75.2+/-117.8 ppb e) 99.7+/-97.2 ppb f) 47.2+/-24.2 ppb g) 113.1+/-98.9 ppb h) 26.7+/-21.9 ppb i) 29.3+/-14.4 ppb Wet wt	a) 1972 b) 1973 c) 1974 d) 1975 e) 1978 f) 1979 g) 1981 h) 1982 i) 1983 Years collected from nests, immediately prior to flight. Detection limit 0.5 ng/g (ppb). Finland GC-EC

MUSCLES; ADIPOSE TISSUE; BIRDS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FINLAND; JUVENILES; CHLORINATED HYDROCARBONS; DDD; DDE; DDT; HEXACHLOROBENZENE; MERCURY; LINDANE; OXYCHLORDANE; BIOACCUMULATION; PESTICIDES; PESTICIDE RESIDUES
Paasivirta, J.; Paukku, R.; Surma-Aho, K.; Welling, L. 1985 Chemosphere 14(5):457-468

Tissue	Cases Exposure Route	Range	Mean	General Information
6856 Muscle	10	0.03-0.31 ppm Wet wt	0.12+/-0.10 ppm Wet wt	8 adults, 2 juveniles, mean wt 81+/-8 g. Shot 7/76. Sweden, Vastergotland, Vanersborg GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Sucker, redhorse
MOXOSTOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6857 Body		Not applicable	6.63 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
6858 Body		Not applicable	0.655 mg/kg	Chequamegon Bay, Lake Superior, WI, 8/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Tissue	Cases Exposure Route	Range	Mean	General Information
6859 Body, whole	48	60-90 ng/g Wet wt	Not given	Collected Jun-Aug 1980, 1981, or 1982 at Alamosa National Wildlife Refuge, CO. Length 73-188 mm, avg wt 15 g. Data also given for mixed species. Colorado GC

ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE
Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Swallow, barn
HIRUNDO RUSTICA

Tissue	Cases Exposure Route	Range	Mean	General Information
6860 Carcass	21	1.64-2.85 ppm Wet wt	2.24+/-0.61 ppm S.E. Wet wt Arithmetic	Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Detected in both of 2 composite samples that excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. Utah GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Swallow, cliff
HIRUNDO PYRRHONOTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6861 Carcass	133	0.11-0.40 ppm Wet wt	0.15+/-0.03 ppm S.E. Wet wt Arithmetic	Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Detected in all 10 of 14 composite samples that excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico; Colorado; Utah; Wyoming; Idaho; Oregon; Montana GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Swallow, northern rough-winged
STELGIDOPTERYX SERRIPENNIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6862 Carcass	7	Not applicable	0.23 ppm Wet wt	Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Detected in 1 composite sample that excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. Oregon GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Swallow, tree
TACHYCINETA BICOLOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6863 Body	a) 5 b) 6 c) 3	a) Not given b) Not given c) Not given	a) 0.30 ppm b) 0.37 ppm c) Not detected Wet wt	a) Live nesting females collected 6-7/1981, positive in 2/5, maximum level 0.60 ppm wet wt, lipids 12.9+/-0.7% b) Dead females collected 6-7/1980-81, max level 0.84 ppm wet wt, lipids 8+/-1.9% c) Dead nestlings collected 6-7/1980-81, detection limit 0.5 ppm. Colorado, Boulder Co. and Gilpin Co., Rocky Mountains GLC; EC

BIRDS; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENYLS; EGGS; BODY; BRAIN; DDT; HEPTACHLOR EPOXIDE; DIELDRIN; TERRESTRIAL
DeWeese, L.R.; Cohen, R.R.; Stafford, C.J. 1985 Bulletin of Environmental Contamination and Toxicology 35:767-775

Tissue	Cases Exposure Route	Range	Mean	General Information
6864 Carcass	a) 23 b) 14	a) 0.28-1.04 ppm b) 0.45-0.48 ppm Wet wt	a) 0.42+/-0.06 ppm b) 0.46+/-0.01 ppm S.E. Wet wt Arithmetic	a) Detected in 19/23 individuals b) Detected in 2/2 composite samples Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. Colorado; Oregon; Montana GC-EC

CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES
DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693

Tissue	Cases Exposure Route	Range	Mean	General Information
6865 Eggs	a) 5 b) 5	a) Not given b) Not given	a) 0.25 ppm b) 0.33 ppm Wet wt	a) Collected from attended nests 6-7/1981, positive in 1/5, maximum level 0.25 ppm wet wt, lipids 2.9+/-0.2% b) Collected from unattended nests 6-7/1980-81, positive in 3/5, max level 0.51 ppm wet wt, lipids 5.2+/-0.4%. Colorado, Boulder Co. and Gilpin Co., Rocky Mountains GLC; EC

BIRDS; ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS; DDE; POLYCHLORINATED BIPHENYLS; EGGS; BODY; BRAIN; DDT; HEPTACHLOR EPOXIDE; DIELDRIN; TERRESTRIAL
DeWeese, L.R.; Cohen, R.R.; Stafford, C.J. 1985 Bulletin of Environmental Contamination and Toxicology 35:767-775

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Swallow, violet-green
TACHYCINETA THALASSINA

Tissue	Cases Exposure Route	Range	Mean	General Information
6866 Carcass	a) 10 b) 48	a) 0.60-6.65 ppm b) 0.19-0.35 ppm Wet wt	a) 2.97+/-0.58 ppm b) 0.23+/-0.05 ppm S.E. Wet wt Arithmetic	Detected in 10/10 individuals b) Detected in 5/6 composite samples Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.10 ppm wet wt. New Mexico; Colorado; Idaho; Oregon GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Swift, white-throated
AERONAUTES SAXATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6867 Carcass	37	0.17-0.25 ppm Wet wt	0.16+/-0.06 ppm S.E. Wet wt Arithmetic	Migratory insectivores, prey of peregrine falcon, shot 5/80-7/80. Detected in 3 of 4 composite samples that excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.01 ppm wet wt. New Mexico; Colorado GC-EC
CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693				

Teal, green-winged
ANAS CRECCA

Tissue	Cases Exposure Route	Range	Mean	General Information
6868 Adipose	1	Not applicable	0.81 ug/g Wet wt	Collected 10/14/81. Juvenile, 0.37 kg, shot by hunter. New York, Hudson River GC-EC
6869 Muscle	1	Not applicable	0.27 ug/g Wet wt	Breast Collected 10/14/81. Juvenile, 0.37 kg, shot by hunter. New York, Hudson River GC-EC
ADIPOSE TISSUE; MUSCLES; LIVER; GEESE; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; DDE; POLYCHLORINATED BIPHENYLS; BIOLOGICAL MONITORING; POPULATION EXPOSURE; BIOACCUMULATION; WATERFOWL Kim, H.T.; Kim, K.S.; Kim, J.S.; Stone, W.B. 1985 Archives of Environmental Contamination and Toxicology 14:13-18				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Teal, green-winged
ANAS CRECCA

Tissue	Cases Exposure Route	Range	Mean	General Information
6870 Muscle	6	0.07-0.31 ppm Wet wt	0.14+/-0.10 ppm Wet wt	4 adults, 2 juveniles, mean wt 345+/-31 g. Shot 6/76-7/76 and 6/77-9/77. Sweden, Norrbotten, Gallivare GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Tench
TINCA TINCA

Tissue	Cases Exposure Route	Range	Mean	General Information
6871 Muscle	1	Not applicable	21 mg/kg Fat basis	Caught 1980, Haggan River, 5.3% fat content. Sweden GC/MS; GC-EC
SWEDEN; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; DDT; POLYCHLORINATED BIPHENYLS; BROMINATED HYDROCARBONS; WATER POLLUTION Anderson, O.; Blomkvist, G. 1981 Chemosphere 10(9):1051-1060				

Tern, Caspian
STERNA CASPIA

Tissue	Cases Exposure Route	Range	Mean	General Information
6872 Brain	1	Not applicable	0.58 ug/g Wet wt	From group found dead or dying, Umatilla National Wildlife Refuge, 1980. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Tern, common
STERNA HIRUNDO

Tissue	Cases Exposure Route	Range	Mean	General Information
6873 Blood	5	a) 11-19 ppm b) 0.2-0.3 ppm	a) 14 ppm b) 0.2 ppm	a) Lipid basis b) Fresh wt From pre-fledglings collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Duluth-Superior Harbor GC

(next page)

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tern, common
STERNA HIRUNDO

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6874 Eggs	10	2.5-8.2 ppm Fresh wt	5.2 ppm Fresh wt	Collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Duluth-Superior Harbor GC
6875 Muscle		a) 11-47 ppm b) 1.3-3.4 ppm c) 51-86 ppm d) 4.2-7.5 ppm	a) 30 ppm b) 2.5 ppm c) 63 ppm d) 5.1 ppm	a) Pre-fledge, lipid basis, 5 cases b) Samples in a, fresh wt c) Post-fledge, lipid basis, 7 cases d) Samples in c), fresh wt Collected in 1977 nesting season. Detection limit 0.1 ppm. Lake Superior, Duluth-Superior Harbor GC
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; TERNS; GULLS; BLOOD; EGGS; MUSCLES; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; DDE; DDT; HEXACHLOROBENZENE; LAKE SUPERIOR; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BIOACCUMULATION; AGE Niemi, G.J.; Davis, T.E.; Veith, G.D.; Vieux, B. 1986 Archives of Environmental Contamination and Toxicology 15:313-320				

Tern, Forster's
STERNA FORSTERI

Tissue	Cases Exposure Route	Range	Mean	General Information
6876 Eggs		a) Not given b) Not given	a) 39+/-17 mg/kg b) 7+/-3 mg/kg	a) Green Bay, Oconto Marsh, heavily contaminated b) Lake Poygan, relatively clean Collected 1983. Wisconsin CC; EC
FISHES; BIRDS; ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; EGGS; WISCONSIN; GREAT LAKES; BIOMAGNIFICATION; POLYCHLORINATED DIBENZOFURANS; POLYCHLORINATED DIBENZODIOXINS; POLYCHLORINATED BIPHENYLS Stalling, D.L.; Norstrom, R.J.; Smith, L.M.; Simon, M. 1985 Chemosphere 14(6/7):627-643				

Tissue	Cases Exposure Route	Range	Mean	General Information
6877 Eggs	1	Not applicable	1.60 ug/g Wet wt	Collected from nests, 1978, Umatilla National Wildlife Refuge. Detection limit 0.5 ug/g. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Thrush, song
TURDUS PHILOMELOS

Tissue	Cases Exposure Route	Range	Mean	General Information
6878 Muscle	1	Not detected	Not detected	Adult, 63 g. Shot 7/76. Detection limit 300 pg. Sweden, Vastergotland, Vanersborg GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS

Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Trout, Bothnian Bay
SALMO TRUTTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6879 Eggs	11	280-680 ppb Wet wt	434+/-122 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg egg fat 2.72%. Finland, Baltic Sea GC-EC
6880 Liver	11	160-297 ppb Wet wt	232+/-44.3 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg liver fat 2.72%. Finland, Baltic Sea GC-EC
6881 Muscle	11	147-733 ppb Wet wt	425+/-173 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg muscle fat 3.15%. Finland GC-EC

FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES

Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740

Trout, lake
SALVELINUS NAMAYCUSH

Tissue	Cases Exposure Route	Range	Mean	General Information
6882 Body	a) 9 b) 30 c) 30	a) Not given b) Not given c) Not given	a) 12.86 mg/kg b) 22.91 mg/kg c) 18.68 mg/kg Wet wt	a) 1972 b) 1974 c) 1976 Dates (fall) of collection. Includes Aroclors 1248, 1254 and 1260. Lake Michigan off Saugatuck. Data included for additional years. Great Lakes, upper GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; POLYCHLORINATED BIPHENYLS; DDT; DIELDRIN; OXYCHLORDANE; GREAT LAKES; WATER POLLUTION; COMPARATIVE EVALUATIONS

DeVault, D.S.; Willford, W.A.; Hesselberg, R.J.; Nortrupt, D.A.; Rundberg, E.G.S.; Alwan, A.K.; Bautista, C. 1986 Archives of Environmental Contamination and Toxicology 15:349-356

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Trout, sea
SALMO OCLA

Tissue	Cases Exposure Route	Range	Mean	General Information
6883 Muscle	5	6.3-15 mg/kg Fat basis	12 mg/kg Fat basis	Caught 1979, near outflow of Viskan River at Klosterfjorden Bay, 1.1% fat content. Sweden GC/MS; GC-EC
SWEDEN; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; DDT; POLYCHLORINATED BIPHENYLS; BROMINATED HYDROCARBONS; WATER POLLUTION Anderson, O.; Blomkvist, G. 1981 Chemosphere 10(9):1051-1060				

Turtle, snapping
CHELYDRA SERPENTINA

Tissue	Cases Exposure Route	Range	Mean	General Information
6884 Adipose	a) 7 b) 6 c) 8 d) 3 e) 8	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 41.20+/-37.24 ppm b) 36.17+/-81.16 ppm c) 291.13+/-304.82 ppm d) 34.07+/-15.56 ppm e) 23.55+/-11.19 ppm Lipid wt	a) Males, uncontaminated area of Maryland b) Females c) Contaminated brackish water, Hakensack Meadowlands New Jersey, males d) Females e) Contaminated fresh water, New Jersey, males Collected 6-8/81 and 6-8/82. Frequency of detection 100%. Detection limit 0.5 ppm. % lipid was, respectively: 63.29+/-14.49, 71.00+/-9.76, 13.88+/-13.07, 24.67+/-18.82 73.38+/-8.05. New Jersey; Maryland Lowered lipid content, reduced growth in animals from brackish-water area in NJ GLC
ENVIRONMENTAL EXPOSURE; TURTLES; AQUATIC; LIVER; KIDNEYS; ADIPOSE TISSUE; NEW JERSEY; MARYLAND; CADMIUM; CHROMIUM; COPPER; LEAD; MERCURY; NICKEL; ZINC; CHLORDANE; NONACHLOR; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDES; METALS; WATER POLLUTION Albers, P.H.; Sileo, L.; Mulhern, B.M. 1986 Archives of Environmental Contamination and Toxicology 15:39-49				

Vulture, black
CORAGYPS ATRATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6885 Adipose	1	Not applicable	3.80 ug/g Wet wt	Collected 3/28/72. Florida, Alachua County GC-EC
6886 Muscle	1	Not applicable	0.29 ug/g Wet wt	Collected 3/28/72. Florida, Alachua County GC-EC
FLORIDA; TERRESTRIAL; BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; ADIPOSE TISSUE; CHLORINE ORGANIC COMPOUNDS; MUSCLES; BRAIN; LIVER; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; PESTICIDES Sundlof, S.F.; Forrester, D.J.; Thompson, N.P.; Collopy, M.W. 1986 Journal of Wildlife Diseases 22(1):71-82				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Walleye
STIZOSTEDION VITREUM VITREUM

Tissue	Cases Exposure Route	Range	Mean	General Information
6887 Body		a) Not applicable b) Not applicable c) Not applicable	a) 0.835 mg/kg b) 8.61 mg/kg c) 0.40 mg/kg	a) Wolf River, WI, 9/15/80 b) Fox River, WI, below DePere, 10/15/80 c) Chequamegon Bay, Lake Superior, WI, 8/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Whale, beluga
DELPHINAPTERUS LEUCAS

Tissue	Cases Exposure Route	Range	Mean	General Information
6888 Adipose	2	59.09+/-4.73-72.15+/-5.77 ug/g Wet wt	Not given	Blubber from beached, dead males, part of group of 4 animals drifting ashore between 11/83 and 12/84. Means of replicate analyses. Canada, Saint Lawrence Estuary GC/MS
6889 Kidney	3	0.68+/-0.05-10.03+/-0.80 ug/g Wet wt	Not given	From beached, dead males, part of group of 4 animals drifting ashore between 11/83 and 12/84. Means of replicate analyses. Canada, Saint Lawrence Estuary GC/MS
6890 Liver	3	0.49+/-0.04-2.55+/-0.20 ug/g Wet wt	Not given	From beached, dead males, part of group of 4 animals drifting ashore between 11/83 and 12/84. Means of replicate analyses. Canada, Saint Lawrence Estuary GC/MS
6891 Lung	2	0.21+/-0.02-0.56+/-0.05 ug/g Wet wt	Not given	From beached, dead males, part of group of 4 animals drifting ashore between 11/83 and 12/84. Means of replicate analyses. Canada, Saint Lawrence Estuary GC/MS
6892 Milk	1	Not applicable	1.72+/-0.14 ug/g Wet wt	From beached, dead female, part of group of 4 animals drifting ashore between 11/83 and 12/84. Mean of replicate analyses. Canada, Saint Lawrence Estuary GC/MS
ENVIRONMENTAL EXPOSURE; AQUATIC; WHALES; MAMMALS; CANADA; POLYCHLORINATED BIPHENYLS; DDE; DDT; ADIPOSE TISSUE; LIVER; LUNGS; KIDNEYS; MILK; PESTICIDES; INDUSTRIAL CHEMICALS; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS Masse, R.; Martineau, D.; Tremblay, L.; Beland, P. 1986 Archives of Environmental Contamination and Toxicology 15:567-579				

Biphenyl, chloro (8 Cl); 1,1'-Biphenyl, chloro derivs (9 Cl)
1336-36-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Whimbrel
NUMENIUS PHAEOPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6893 Muscle	4	0.07-0.12 ppm Wet wt	0.09+/-0.03 ppm Wet wt	Adults, mean wt 350+/-42 g. Shot 6/76-7/76. Sweden, Norrbotten, Gallivare GC-EC
MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212				

Woodcock
PHILOHELA MINOR

Tissue	Cases Exposure Route	Range	Mean	General Information
6894 Wing				Review of organochlorine pollutants in various species from the bay and from coastal and watershed areas. In addition to levels, eggshell thickness discussed. Expect impact of organochlorine pollutants to be less than it has in previous years. Chesapeake Bay
ENVIRONMENTAL EXPOSURE; AQUATIC; TERRESTRIAL; BIRDS; DDT; DDD; DDE; DIELDRIN; HEPTACHLOR EPOXIDE; MIREX; KEPONE; POLYCHLORINATED BIPHENYLS; CHLORDANE; NONACHLOR; BRAIN; LIVER; CARCASS; WINGS; BODY; BLOOD; EGGS; MUSCLES; REVIEW; PESTICIDES; PESTICIDE RESIDUES; CHLORINE ORGANIC COMPOUNDS Ohlendorf, H.M. 1981 Trans 46th North American Wildlife and Natural Resource Conf				

Wrasse, ballan
LABRUS BERGGYLTA

Tissue	Cases Exposure Route	Range	Mean	General Information
6895 Liver	a) 10 b) 10	a) Not detected-130 ug/kg b) Not detected-63 ug/kg Wet wt	a) 23+/-43 ug/kg b) 31+/-21 ug/kg Wet wt	a) 1977 b) 1982 Year of collection in Sogndalsfjord. Limit of detection 5 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Biphenyl, 2-chloro- (8 CI); 1,1'-Biphenyl, 2-chloro- (9 CI)
2051-60-7
C12-H9-Cl
Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6896 Body		a) Not given b) Not given	a) 0.07+/-0.04 ug/g b) 0.3+/-0.04 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC

BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION
Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6897 Body		a) Not given b) Not given	a) 0.08+/-0.05 ug/g b) 0.6+/-0.2 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC

BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION
Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6898 Body		a) Not given b) Not given	a) 0.3+/-0.1 ug/g b) 0.004+/-0.002 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC

BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION
Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105

Biphenyl, 2,2'-dichloro- (8 Cl); 1,1'-Biphenyl, 2,2'-dichloro- (9 Cl)
13029-08-8
C12-H8-Cl2

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6899 Body		a) Not given b) Not given	a) 0.05+/-0.01 ug/g b) 0.8+/-0.04 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC

BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION
Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6900 Body		a) Not given b) Not given	a) 0.03+/-0.01 ug/g b) 3+/-0.8 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC

BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION
Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6901 Body		a) Not given b) Not given	a) 0.2+/-0.09 ug/g b) 0.1+/-0.01 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC

BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION
Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105

Biphenyl, 2,2',3,3'-tetrachloro- (No postings in CHEMLINE).

Reindeer
RANGIFER sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6902 Body	2 Ingestion	9.8-11.8 ug	10.8 ug	Total burden in 3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was not determined. Means calculated by extractor. Sweden, Lake Rogen district
6903 Liver	2 Ingestion	0.36-0.82 ng/g	0.59 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was not determined. Means calculated by extractor. Value lower in 4-yr old. Sweden, Lake Rogen district
6904 Muscle	2 Ingestion	0.36-0.47 ng/g	0.41 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was not determined. Means calculated by extractor. Sweden, Lake Rogen district

ENVIRONMENTAL EXPOSURE; DEER; BODY; MUSCLES; LIVER; SWEDEN; TERRESTRIAL; FOOD CONTAMINATION; ANIMAL FEEDS; POLYCHLORINATED BIPHENYLS; DDD; DDE; LINDANE; HEXACHLOROBENZENE; PESTICIDES

Villeneuve, J.P.; Holm, E.; Cattini, C. 1985 Chemosphere 14(11/12):1651-1658

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
6905 Body	10	Not given	5.6+/-2.7 ng/g	Comparison of laboratory- and field-derived bioconcentration factors (BCFs) for 34 chemicals showed predictions based on lab BCFs useful for chemicals with short half-lives but too low for long half-life chemicals where contaminated food is major source. Lake Ontario, Ganaraska River CC; EC

FISHES; ENVIRONMENTAL EXPOSURE; BIOCONCENTRATION; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WATER POLLUTION; POLYCHLORINATED BIPHENYLS

Oliver, B.G.; Niimi, A.J. 1985 Environmental Science and Technology 19:842-849

Biphenyl, 2,2',4,4'-tetrachloro- (8 Cl); 1,1'-Biphenyl, 2,2',4,4'-tetrachloro- (9 Cl)
2437-79-8
C12-H6-Cl4
MW 291.98

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6906 Body		a) Not given b) Not given	a) 0.7+/-0.1 ug/g b) 0.6+/-0.03 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6907 Body		a) Not given b) Not given	a) 0.3+/-0.1 ug/g b) 1.6+/-0.2 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6908 Body		a) Not given b) Not given	a) 0.1+/-0.02 ug/g b) 0.1+/-0.01 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,2',4',6'-tetrachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6909 Body		a) Not given b) Not given	a) 0.1+/-0.06 ug/g b) 0.4+/-0.03 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6910 Body		a) Not given b) Not given	a) 0.1+/-0.04 ug/g b) 1.1+/-0.2 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6911 Body		a) Not given b) Not given	a) 0.06+/-0.02 ug/g b) 0.03+/-0.004 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3,',4,4'-tetrachloro- (8 Cl); 1,1'-Biphenyl, 2,3',4,4'-tetrachloro-(9 Cl)
32598-10-0
C12-H6-Cl4
MW 291.98

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6912 Body		a) Not given b) Not given	a) 1.1+/-0.2 ug/g b) 0.5+/-0.01 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6913 Body		a) Not given b) Not given	a) 0.5+/-0.2 ug/g b) 1.6+/-0.2 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6914 Body		a) Not given b) Not given	a) 0.5+/-0.05 ug/g b) 0.1+/-0.02 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3,2',3',4'-pentachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6915 Body		a) Not given b) Not given	a) 0.7+/-0.1 ug/g b) 1.3+/-0.02 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6916 Body		a) Not given b) Not given	a) 0.3+/-0.1 ug/g b) 1.8+/-0.3 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6917 Body		a) Not given b) Not given	a) 0.2+/-0.005 ug/g b) 0.1+/-0.01 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3,2',3',5',6'-hexachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6918 Body		a) Not given b) Not given	a) 0.01+/-0.004 ug/g b) 0.1+/-0.1 ug/g Wet wt	a) Roger's Island b) Thompson's Island *Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known.* New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6919 Body		a) Not given b) Not given	a) 0.003+/-0.003 ug/g b) 0.03+/-0.004 ug/g Wet wt	a) Roger's Island b) Thompson's Island *Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known.* New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6920 Body		a) Not given b) Not given	a) 0+/-0 ug/g b) 0.004+/-0.002 ug/g Wet wt	a) Thompson's Island b) Stillwater *Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known.* New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3,2',3',6'-pentachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6921 Body		a) Not given b) Not given	a) 0.2+/-0.04 ug/g b) 0.4+/-0.03 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6922 Body		a) Not given b) Not given	a) 0.07+/-0.03 ug/g b) 0.5+/-0.02 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6923 Body		a) Not given b) Not given	a) 0.05+/-0.02 ug/g b) 0.02+/-0.003 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3,2',4',5'-pentachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6924 Body		a) Not given b) Not given	a) 0.3+/-0.06 ug/g b) 0.4+/-0.009 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6925 Body		a) Not given b) Not given	a) 0.1+/-0.06 ug/g b) 0.6+/-0.09 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6926 Body		a) Not given b) Not given	a) 0.1+/-0.005 ug/g b) 0.07+/-0.01 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3,4,2',3',6'-hexachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6927 Body		a) Not given b) Not given	a) 0.1+/-0.03 ug/g b) 0.4+/-0.003 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6928 Body		a) Not given b) Not given	a) 0.05+/-0.008 ug/g b) 0.4+/-0.1 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6929 Body		a) Not given b) Not given	a) 0.06+/-0.01 ug/g b) 0.04+/-0.01 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3,6,2',3',4',6'-heptachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6930 Body		a) Not given b) Not given	a) 0.4+/-0.08 ug/g b) 0.7+/-0.1 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6931 Body		a) Not given b) Not given	a) 0.2+/-0.07 ug/g b) 1.0+/-0.1 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6932 Body		a) Not given b) Not given	a) 0.2+/-0.03 ug/g b) 0.2+/-0.02 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3'-dichloro- (8 Cl); 1,1'-Biphenyl, 2,3'-dichloro- (9 Cl)
25569-80-6
C12-H8-Cl2
Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6933 Body		a) Not given b) Not given	a) 0.06+/-0.01 ug/g b) 0.07+/-0.002 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6934 Body		a) Not given b) Not given	a) 0.03+/-0.01 ug/g b) 0.06+/-0.02 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6935 Body		a) Not given b) Not given	a) 0.01+/-0.008 ug/g b) 0.07+/-0.002 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,3',4',5-tetrachloro- (8 CI); 1,1'Biphenyl, 2,3',4',5-tetrachloro- (9 CI)
32598-11-1
C12-H6-Cl4
MW 291.98

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6936 Body		a) Not given b) Not given	a) 1.6+/-0.3 ug/g b) 1.2+/-0.03 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6937 Body		a) Not given b) Not given	a) 0.8+/-0.3 ug/g b) 2.6+/-0.1 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6938 Body		a) Not given b) Not given	a) 0.4+/-0.03 ug/g b) 0.2+/-0.02 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,4,2',3',4'-pentachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6939 Body		a) Not given b) Not given	a) 0.4+/-0.9 ug/g b) 0.7+/-0.004 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6940 Body		a) Not given b) Not given	a) 0.2+/-0.8 ug/g b) 1.4+/-0.2 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6941 Body		a) Not given b) Not given	a) 0.2+/-0.02 ug/g b) 0.2+/-0.03 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,4'-dichloro- (No postings in CHEMLINE).
C12-H8-Cl2

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6942 Body		a) Not given b) Not given	a) 0.06+/-0.01 ug/g b) 0.3+/-0.01 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6943 Body		a) Not given b) Not given	a) 0.04+/-0.008 ug/g b) 0.5+/-0.2 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6944 Body		a) Not given b) Not given	a) 0.05+/-0.02 ug/g b) 0.01+/-0.002 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,5,2'-trichloro- (No postings in CHEMLINE).

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
6945 Body	10	Not given	13+/-5 ng/g	Comparison of laboratory- and field-derived bioconcentration factors (BCFs) for 34 chemicals showed predictions based on lab BCFs useful for chemicals with short half-lives but too low for long half-life chemicals where contaminated food is major source. Lake Ontario, Ganaraska River CC; EC
FISHES; ENVIRONMENTAL EXPOSURE; BIOCONCENTRATION; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WATER POLLUTION; POLYCHLORINATED BIPHENYLS Oliver, B.G.; Niimi, A.J. 1985 Environmental Science and Technology 19:842-849				

Biphenyl, 2,5,2',3',5',6'-hexachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6946 Body		a) Not given b) Not given	a) 0.02+/-0.008 ug/g b) 0.2+/-0.01 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6947 Body		a) Not given b) Not given	a) 0.012+/-0.005 ug/g b) 0.3+/-0.05 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,5,2',3',5',6'-hexachloro- (No postings in CHEMLINE).

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6948 Body		a) Not given b) Not given	a) 0.02+/-0.003 ug/g b) 0.01+/-0.003 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,5,2',4',5'-pentachloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6949 Body		a) Not given b) Not given	a) 0.3+/-0.07 ug/g b) 0.6+/-0.005 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6950 Body		a) Not given b) Not given	a) 0.2+/-0.06 ug/g b) 0.9+/-0.2 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 2,5,2',4',5'-pentachloro- (No postings in CHEMLINE).

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6951 Body		a) Not given b) Not given	a) 0.1+/-0.01 ug/g b) 0.07+/-0.01 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 3,2',4'-trichloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6952 Body		a) Not given b) Not given	a) 0+/-0 ug/g b) 0.8+/-0.03 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6953 Body		a) Not given b) Not given	a) 0.1+/-0.1 ug/g b) 1.6+/- 0.07 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 3,2',4'-trichloro- (No postings in CHEMLINE).

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6954 Body		a) Not given b) Not given	a) 0.4+/-6.0 ug/g [sic] b) 0.7+/-0.2 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 3,2',5'-trichloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6955 Body		a) Not given b) Not given	a) 0.1+/-0.02 ug/g b) 0+/-0 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6956 Body		a) Not given b) Not given	a) 0.06+/-0.02 ug/g b) 1.0+/-1.0 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 3,2',5'-trichloro- (No postings in CHEMLINE).

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6957 Body		a) Not given b) Not given	a) 0+/-0 ug/g b) 0.05+/-0.05 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 3,3',4,4'-tetrachloro- (8 CI); 1,1'-Biphenyl, 3,3',4,4'-tetrachloro- (9 CI)
32598-13-3
C12-H6-Cl4
MW 291.98
Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6958 Body		a) Not given b) Not given	a) 0.004+/-0.002 ug/g b) 0.002+/-0.002 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6959 Body		a) Not given b) Not given	a) 0.0+/-0.0 ug/g b) 0.06+/-0.06 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 3,3',4,4'-tetrachloro- (8 CI); 1,1'-Biphenyl, 3,3',4,4'-tetrachloro- (9 CI)
32598-13-3
C12-H6-Cl4
MW 291.98

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6960 Body		a) Not given b) Not given	a) 0+/-0 ug/g b) 0.01+/-0.006 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Chicken
GALLUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6961 Embryo	4 Injection	0.15-0.25 ug/g Fat basis	0.18 ug/g Fat basis	13-day old embryos from egg yolks of which had been injected, after 4-d incubation, with 0.01 mg/kg of egg. Sweden GC-EC
DELIBERATE EXPOSURE; TERRESTRIAL; EMBRYOS; POLYCHLORINATED BIPHENYLS; INDUSTRIAL CHEMICALS; SWEDEN; BIRDS; CHICKENS; PHEASANTS; INJECTION Brunstrom, B.; Reutergardh, L. 1986 Environmental Pollution (Series A) 42:37-45				

Goldeneye
BUCEPHALA CLANGULA

Tissue	Cases Exposure Route	Range	Mean	General Information
6962 Embryo	2 Injection	0.9-1.3 ug/g Fat basis	1.10 ug/g Fat basis	16-day old embryos from egg yolks of which had been injected, after 4-d incubation, with 0.1 mg/kg of egg. Sweden GC-EC
DELIBERATE EXPOSURE; TERRESTRIAL; EMBRYOS; POLYCHLORINATED BIPHENYLS; INDUSTRIAL CHEMICALS; SWEDEN; BIRDS; CHICKENS; PHEASANTS; INJECTION Brunstrom, B.; Reutergardh, L. 1986 Environmental Pollution (Series A) 42:37-45				

Biphenyl, 3,3',4,4'-tetrachloro- (8 CI); 1,1'-Biphenyl, 3,3',4,4'-tetrachloro- (9 CI)
32598-13-3
C12-H6-Cl4
MW 291.98
Pheasant, ring-necked
PHASIANUS COLCHICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6963 Embryo	5 Injection	0.7-1.4 ug/g Fat basis	1.0 ug/g Fat basis	14-day old embryos from egg yolks of which had been injected, after 4-d incubation, with 0.1 mg/kg of egg. Sweden Decreased hatching rate (all embryos killed) with dose of 1.0 mg/kg, no effect with 0.1 mg. GC-EC
DELIBERATE EXPOSURE; TERRESTRIAL; EMBRYOS; POLYCHLORINATED BIPHENYLS; INDUSTRIAL CHEMICALS; SWEDEN; BIRDS; CHICKENS; PHEASANTS; INJECTION Brunstrom, B.; Reutergardh, L. 1986 Environmental Pollution (Series A) 42:37-45				

Biphenyl, 3,4,2',3',4',6'-hexachloro- (No postings in CHEMLINE).
Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6964 Body		a) Not given b) Not given	a) 0.04+/-0.008 ug/g b) 0.2+/-0.1 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6965 Body		a) Not given b) Not given	a) 0.03+/-0.006 ug/g b) 0.1+/-0.03 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 3,4,2',3',4',6'-hexachloro- (No postings in CHEMLINE).

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6966 Body		a) Not given b) Not given	a) 0.03+/-0.006 ug/g b) 0.02+/-0.002 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 4,2',3'-trichloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6967 Body		a) Not given b) Not given	a) 0.7+/-0.2 ug/g b) 1.3+/-0.05 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6968 Body		a) Not given b) Not given	a) 0.4+/-0.2 ug/g b) 2.6+/-0.4 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 4,2',3'-trichloro- (No postings in CHEMLINE).

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6969 Body		a) Not given b) Not given	a) 0.2+/-0.08 ug/g b) 0.1+/-0.03 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 4,2',6'-trichloro- (No postings in CHEMLINE).

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6970 Body		a) Not given b) Not given	a) 0.4+/-0.1 ug/g b) 0.9+/-0.02 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6971 Body		a) Not given b) Not given	a) 0.1+/-0.06 ug/g b) 2.0+/-0.4 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 4,2',6'-trichloro- (No postings in CHEMLINE).

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6972 Body		a) Not given b) Not given	a) 0.1+/-0.04 ug/g b) 0.08+/-0.004 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 4,4'-dichloro- (8 CI); 1,1'-Biphenyl, 4,4'-dichloro- (9 CI)
2050-68-2
C12-H8-Cl2
MW 223.11, MP 148-149 C, BP 315-319 C

Caddisfly (Cheumatopsyche)
CHEUMATOPSYCHE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6973 Body		a) Not given b) Not given	a) 0.09+/-0.03 ug/g b) 0.1+/-0.05 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Caddisfly (H. leonardi)
HYDROPSYCHE LEONARDI

Tissue	Cases Exposure Route	Range	Mean	General Information
6974 Body		a) Not given b) Not given	a) 0.06+/-0.03 ug/g b) 0.3+/-0.07 ug/g Wet wt	a) Roger's Island b) Thompson's Island Collection sites on upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Biphenyl, 4,4'-dichloro- (8 CI); 1,1'-Biphenyl, 4,4'-dichloro- (9 CI)

2050-68-2
C12-H8-Cl2
MW 223.11, MP 148-149 C, BP 315-319 C

Caddisfly (P. guttifer)
PYCNOPSYCHE GUTTIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
6975 Body		a) Not given b) Not given	a) 0.2+/-0.02 ug/g b) 0.3+/-0.009 ug/g Wet wt	a) Thompson's Island b) Stillwater Collection sites in upper Hudson River. Stream monitoring through PCB levels in larvae is practical if bioconcentration factor of species is known. New York GC
BODY; INSECTS; AQUATIC; ENVIRONMENTAL EXPOSURE; NEW YORK; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; BIOINDICATORS; WATER POLLUTION Bush, B.; Simpson, K.W.; Shane, L.; Koblintz, R. 1985 Bulletin of Environmental Contamination and Toxicology 34:96-105				

Boron

7440-42-8
B
AtW 10.81, MP 2200 C (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6976 Liver	1 Ingestion	Not applicable	24 ug/g Wet wt	Usual level for soft tissues <1 ug/ml. Dose (as Borax) ingested at abandoned oil well drilling site, estimated as =/>250 g. 5 of 20 animals died. Canada Weak, staggering, depression, dehydration, diarrhea Hemorrhagic gastroenteritis, death
6977 Stomach	1 Ingestion	a) Not applicable b) Not applicable	a) 21 ug/g b) 19 ug/g Wet wt	a) Abomasum b) Rumen Usual levels for soft tissues <1 ug/ml. Dose (as Borax) ingested at abandoned oil well drilling site, estimated as =/>250 g. 5 of 20 animals died. Canada Weak, staggering, depression, dehydration, diarrhea Hemorrhagic gastroenteritis, death
LIVER; RUMEN; ABOMASUM; STOMACH; ENVIRONMENTAL EXPOSURE; CATTLE; TERRESTRIAL; CANADA; BORON; BIOACCUMULATION; ACCIDENTAL POISONING Brockman, R.P.; Audette, R.J.; Gray, M. 1985 Canadian Veterinary Journal 26:147				

Boron
7440-42-8
B
AtW 10.81, MP 2200 C (approx), BP 2550 C, VP 1.56X10(E-5) atm at 2140 C, 1 mm Hg at 2660 C, 10 mm Hg at 3030 C

Insect

Tissue	Cases Exposure Route	Range	Mean	General Information
6978 Liver	a) 5 b) 7	a) 6.2-35 ppm b) 36-54 ppm Dry wt	a) 13.4 ppm b) 45.2 ppm Dry wt Geometric	a) Detected in 5/5 composite samples of aquatic insects collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 7/7 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. California, San Joaquin Valley AAS
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Mosquitofish
GAMBUSIA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6979 Body	a) 2 b) 4	a) Not detected-3.6 ppm b) 8.0-20 ppm Dry wt	a) 2.75 ppm b) 11.1 ppm Dry wt Geometric	a) Detected in 1/2 composite samples collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 4/4 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. Detection limit not given. California, San Joaquin Valley ICP-AES
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Bromide

24959-67-9
Br
MW 79.90, MP -7.2 C, BP 58.78 C

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6980 Blood, serum	a) 1 b) 1 c) 1 d) 1 e) 1	a) <0.625-<0.625 mEq/L b) 21.11-22.3 mEq/L c) 1.6-1.76 mEq/L d) 39.6-38.1 mEq/L e) 3.15-3.17 mEq/L	a) Not given b) Not given c) Not given d) Not given e) Not given	a) Control b) Goat 3 c) Goat 4 d) Goat 5 e) Goat 6 Members of a small herd pastured adjacent to and downhill from a chemical dump that had received NaBr. Ranges are of determinations from two different laboratories. Georgia Weakness, paralysis, rapid shallow respiration, dehydration as well as ear, eyelid and tail droop. Coma, death (1 case). Submandibular edema, scattered petechiae on mucosal surface of abomasum, lesions on dorsal aspect of caudial lung lobes, diffuse pulmonary edema, centrilobular hepatic vacuolar degeneration.

BLOOD SERUM; ENVIRONMENTAL EXPOSURE; GOATS; TERRESTRIAL; NEUROLOGIC MANIFESTATIONS; AUTOPSIES; BROMIDE; BIOACCUMULATION; LAND POLLUTION; HEALTH HAZARDS

Liggett, A.D.; Jain, A.V.; Blue, J.L. 1985 Journal of the American Veterinary Medical Association 187(1):72-74

Bromine

7726-95-6
Br
AtW 79.904, MP -7.25 C, BP 59.47 C, VP 1 mm Hg at -60 C, 10 mm Hg at -30 C

Sponge
SPIRASTRELLA CUSPIDIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
6981 Body		30-550 ug/g Dry wt	255 ug/g Dry wt	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Bromine

7726-95-6
Br
AtW 79.904, MP -7.25 C, BP 59.47 C, VP 1 mm Hg at -60 C, 10 mm Hg at -30 C

Sponge (P. foetida)
PROSTYLYSSA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
6982 Body		35-550 ug/g Dry wt	250 ug/g Dry wt	Collected during 1978-80 Levels higher during post-monsoon (Oct-Jan). India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Avocet, American
RECURVIROSTRA AMERICANA

Tissue	Cases Exposure Route	Range	Mean	General Information
6983 Liver	a) 10 b) 5 c) 5	a) 0.3-1.6 ppm b) 0.1-0.6 ppm c) 0.2-0.6 ppm Wet wt	a) 0.7 ppm b) 0.4 ppm c) 0.3 ppm Wet wt Geometric means	a) Controls, 11/81 b) Dredge-pits, 10/81 c) Dredge-pits, 2/82 Controls were collected at Port Mansfield or Powderhorn Lake. Others from Neuces Bay, Corpus Christi, at two times while impoundment area with sediment from dredging was covered with water and attractive birds. Limit of detection 0.3 ppm. Texas AAS

LIVER; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; METAL POISONING; LEAD POISONING; LEAD; ZINC; CADMIUM; MERCURY; SELENIUM; ANIMAL POPULATIONS; BIOACCUMULATION; WATER POLLUTION; INDUSTRIAL POLLUTION; INDUSTRIAL PLANTS

White, D.H.; Cromartie, E. 1985 Bulletin of Environmental Contamination and Toxicology 34:295-300

Bass
MICROPTERUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6984 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH

Sherlock, J.C. 1984 Experientia 40(2):152-156

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
6985 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.10 ug/g b) 0.10 ug/g c) 0.35 ug/g d) 0.33 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Bayou Petite Prairie c) Spring Bayou d) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin ES
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Tissue	Cases Exposure Route	Range	Mean	General Information
6986 Muscle	3	0.002-0.004 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Bass, striped
MORONE SAXATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6987 Gonads	a) 9 b) 10	a) 0.01-0.17 ug/g b) Not detected	a) 0.083 ug/g b) Not detected	a) Collected 1978, Choptank River b) Collected April, 1979, Rock Hall, Chesapeake Bay. Detection limit 0.01 ug/g. Mean calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Bass, striped
MORONE SAXATILIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
6988 Liver	a) 28 b) 10	0.24-1.19 ug/g	0.59 ug/g	Collected May, 1978, Turkey Creek. Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
6989 Muscle	a) 28 b) 10	a) 0.04-0.30 ug/g b) 0.03-0.83 ug/g	a) 0.15 ug/g b) 0.34 ug/g	a) Collected May, 1978, Turkey Point b) Collected April, 1979, Rock Detection limit 0.01. Means calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102				

Bear
URSUS SPELEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6990 Bone	4	0.17-0.24 ug/g	Not given	Pleistocene (20-50,000 yr BP) specimens. Humerus, femur and ulna, collected from caves, late 19th century. Significance of sampling techniques, burial site conditions and other geochemical and geographic factors is discussed. France AAS
BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Beetle

Tissue	Cases Exposure Route	Range	Mean	General Information
6991 Body		Not given	1.5 mg/kg Dry wt	Larvae collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Genera were DENDROIDES and NEOPYROCHROA sp. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Beetle, bark
DENDROIDES CANADENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
6992 Body		Not given	6.2 mg/kg Dry wt	Larvae collected June-Oct 79 at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Beetle, carrion
NICROPHORUS TOMENTOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6993 Body		a) Not given b) Not given	a) 0.85 mg/kg b) 1.3 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Bird

Tissue	Cases Exposure Route	Range	Mean	General Information
6994 Liver	a) 2 b) 4	a) 0.34-1.0 ppm b) 0.12-0.96 ppm Dry wt	a) 0.583 ppm b) 0.362 ppm Dry wt Geometric	a) Detected in 2/2 samples collected 1983 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 4/4 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management. California, San Joaquin Valley AAS
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Blowfly
CALLIPHORIDAE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
6995 Body		Not given	29 mg/kg Dry wt	Collected June-Oct 79 at Palmerton, 2 km downwind of smelters. Levels highest of those in all organisms studied. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6996 Liver	a) 10 b) 10 c) 10	a) Not given b) Not given c) Not given	a) <0.15+/-0.07 ug/g b) 3.58+/-0.07 ug/g c) 0.72+/-0.39 ug/g Dry wt	a) Collected from Christianson's Pond, unpolluted site b) From cooling system intake, H.B. Robinson Steam Plant, intermediate Cu levels c) From near effluent discharge, high Cu levels Collected 11/81. Pooled samples. Also studied lab and field exposure. South Carolina, Florence AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; COPPER; LIVER; MUSCLES; SOUTH CAROLINA; WATER POLLUTION Harrison, F.L.; Lam, J.R. 1986 Environmental Health Perspectives 65:125-132				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
6997 Muscle	2	0.002-0.003 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Boar
SUS SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
6998 Liver	5	0.17-2.90 ppm Wet wt	0.45 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
6999 Muscle	5	0.08-0.15 ppm Wet wt	0.12 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Bowfin
AMIA CALVA

Tissue	Cases Exposure Route	Range	Mean	General Information
7000 Body, whole		a) Not given b) Not given c) Not given	a) 0.10 ug/g b) 0.10 ug/g c) 0.10 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Bayou Petite Prairie Collected 6/81. Louisiana, Atchafalaya River Basin ES
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Buffalo, smallmouth
ICTIOBUS BUBALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7001 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.15 ug/g b) 0.10 ug/g c) 0.10 ug/g d) 0.10 ug/g Wet wt Geometric	a) Composite sample from Lake Fausse Point b) Bayou Petite Prairie c) Spring Bayou d) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin ES
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Bullfrog
RANA CATESBEIANA

Tissue	Cases Exposure Route	Range	Mean	General Information
7002 Body	a) 15 b) 15 c) 15 d) 5 e) 5 f) 5 g) 15 h) 15 i) 15	a) Not applicable b) Not detected-0.89 ppm c) Not detected-0.64 ppm d) Not detected-0.45 ppm e) 0.13-0.42 ppm f) Not detected-0.46 ppm g) Not applicable h) Not applicable i) Not applicable Wet wt	a) Not detected b) 0.31 ppm c) 0.26 ppm d) 0.20 ppm e) 0.28 ppm f) 0.24 ppm g) Not detected h) Not detected i) Not detected Wet wt Geometric mean	a) Irondale, Big River b) Deslodge c) Brown's Ford d) Morse Mill e) Cedar Hill f) House Springs g) Upper River, Black River h) Clearwater Lake i) Lower River Collection sites. Big River polluted by Pb tailings from mining begun in 1700's and continued through 1972. Black River drains currently mined area. Limit of detection 0.1 ppm. Missouri, Big River, Black River ICP-AES
7003 Brain	5	Not applicable	0.10 ppm Wet wt	Collected from Deslodge site on Big River, 1982, downstream from Pb tailings piles. Composite samples. Limit of detection 0.1 ppm. Missouri ICP-AES
7004 Kidney	5	Not applicable	40.70 ppm Wet wt	Collected from Deslodge site on Big River, 1982, downstream from Pb tailings piles. Composite samples. Limit of detection 0.1 ppm. Missouri ICP-AES
7005 Liver	5	Not applicable	5.00 ppm Wet wt	Collected from Deslodge site on Big River, 1982, downstream from Pb tailings piles. Composite samples. Limit of detection 0.1 ppm. Missouri ICP-AES
7006 Muscle	5	Not applicable	Not detected	Collected from Deslodge site on Big River, 1982, downstream from Pb tailings piles. Composite samples. Limit of detection 0.1 ppm. Missouri ICP-AES
7007 Skin	5	Not applicable	Not detected	Collected from Deslodge site on Big River, 1982, downstream from Pb tailings piles. Composite samples. Limit of detection 0.1 ppm. Missouri ICP-AES
Niethammer, K.R.; Atkinson, R.D.; Baskett, T.S.; Samson, F.B. 1985				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
7008 Body		a) 6.2-20 ug/g b) 5.9-13 ug/g c) 3.2-8.3 ug/g d) 9.1-22 ug/g e) 8.2-20 ug/g f) 4.7-17 ug/g g) 13-27 ug/g h) 23-38 ug/g Ash wt	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicabl	a) Exposed 3 mo to Cd, then EDTA for 30 d b) Same, EDTA for 60 d c) Same, EDTA for 90 d d) Controls, exposed 3 mo to Cd, then water for 30 d e) Same, water for 60 d f) Same, water for 90 d g) Cd-exposed, 30 d, no treatment after exposure h) Cd-exposed entire time, 3 mo+90 d Excludes viscera and gills. First value in each range is from animals exposed to Cd at 0.01 ppm, second is from those exposed to 0.05 ppm. Values were 0.4, 1.2, 0.8 ug/g for tap water controls, animals at start, unexposed animals given EDTA only, respectively. Japan AAS
7009 Gills		a) 24-65 ug/g b) 10-47 ug/g c) 5.5-30 ug/g d) 38-101 ug/g e) 15-65 ug/g f) 7.4-37 ug/g g) 114-203 ug/g h) 179-576 ug/g Ash wt	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicabl	a) Exposed 3 mo to Cd, then EDTA for 30 d b) Same, EDTA for 60 d c) Same, EdTA for 90 d d) Controls, exposed 3 mo to Cd, then water for 30 d e) Same, water for 60 d f) Same, water for 90 d g) Cd-exposed, 30 d, no treatment after exposure h) Cd-exposed entire time, 3 mo+90 d First value in each range is from animals exposed to Cd at 0.01 ppm, second is from those exposed to 0.05 ppm. Values were 2.2, 3.9, 1.6 ug/g for tap water controls, animals at start, unexposed animals given EDTA only, respectively. Japan AAS

DELIBERATE EXPOSURE; FISHES; AQUATIC; GILLS; VISCERA; BODY; CADMIUM; COPPER; ZINC; METALS; WATER POLLUTION; JAPAN; CHELATING AGENTS

Muramoto, S. 1982 Journal of Environmental Science and Health A17(1):67-74

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
7010 Gills	a) 9 b) 10 c) 10 d) 7 e) 9 f) 9 g) 7 h) 9 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 109 ug/g b) 80.0 ug/g c) 94.3 ug/g d) 1110 ug/g e) 554 ug/g f) 334 ug/g g) 1240 ug/g h) 538 ug/g i) 417 ug/g Ash wt	a) Exposed to 0.01 ppm, survivors (1 deformed fish had 120 ug/g) b) 0.01 ppm Cd+0.12 ppm EDTA c) 0.01 ppm Cd+0.13 ppm DTPA d) 0.05 ppm (1 deformed fish had 245 ug/g) e) 0.05 ppm Cd+0.60 ppm EDTA f) 0.05 ppm Cd+0.67 DTPA g) 0.1 ppm Cd (1 deformed fish had 684 ug/g) h) 0.1 ppm Cd+1.2 ppm EDTA i) 0.1 ppm Cd+1.3 ppm DTPA Exposures for 3 mo. Japan AAS
DELIBERATE EXPOSURE; FISHES; CADMIUM; VISCERA; GILLS; AQUATIC; WATER POLLUTION; JAPAN; BONE DISEASES Muramoto, S. 1981 Bulletin of Environmental Contamination and Toxicology 26:641-646				

Tissue	Cases Exposure Route	Range	Mean	General Information
7011 Viscera		a) 78-229 ug/g b) 53-158 ug/g c) 44-109 ug/g d) 137-315 ug/g e) 115-295 ug/g f) 79-184 ug/g g) 194-376 ug/g h) 27-864 ug/g Ash wt	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) Exposed 3 mo to Cd, then EDTA for 30 d b) Same, EDTA for 60 d c) Same, EdTA for 90 d d) Controls, exposed 3 mo to Cd, then water for 30 d e) Same, water for 60 d f) Same, water for 90 d g) Cd-exposed, 30 d, no treatment after exposure h) Cd-exposed entire time, 3 mo+90 d First value in each range is from animals exposed to Cd at 0.01 ppm, second is from those exposed to 0.05 ppm. Values were 5.2, 3.8, 4.8 ug/g for tap water controls, animals at start, unexposed animals given EDTA only, respectively. Japan AAS
DELIBERATE EXPOSURE; FISHES; AQUATIC; GILLS; VISCERA; BODY; CADMIUM; COPPER; ZINC; METALS; WATER POLLUTION; JAPAN; CHELATING AGENTS Muramoto, S. 1982 Journal of Environmental Science and Health A17(1):67-74				

Cadmium

7440-43-9

Cd

AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Carp

CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
7012 Viscera	a) 9 b) 10 c) 10 d) 7 e) 9 f) 9 g) 7 h) 9 i) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 101 ug/g b) 96.2 ug/g c) 82.3 ug/g d) 720 ug/g e) 419 ug/g f) 325 ug/g g) 851 ug/g h) 407 ug/g i) 338 ug/g Ash wt	a) Exposed to 0.01 ppm, survivors (1 deformed fish had 613 ug/g) b) 0.01 ppm Cd+0.12 ppm EDTA c) 0.01 ppm Cd+0.13 ppm DTPA d) 0.05 ppm (1 deformed fish had 635 ug/g) e) 0.05 ppm Cd+0.60 ppm EDTA f) 0.05 ppm Cd+0.67 DTPA g) 0.1 ppm Cd (1 deformed fish had 1030 ug/g) h) 0.1 ppm Cd+1.2 ppm EDTA i) 0.1 ppm Cd+1.3 ppm DTPA Exposures for 3 mo. Japan Mortality (up to 30%) at highest doses. Skeletal deformations, probabaly from osteal decalcification. AAS
DELIBERATE EXPOSURE; FISHES; CADMIUM; VISCERA; GILLS; AQUATIC; WATER POLLUTION; JAPAN; BONE DISEASES Muramoto, S. 1981 Bulletin of Environmental Contamination and Toxicology 26:641-646				

Catbird

DUMETELLA CAROLINENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7013 Body	a) 2 b) 1	a) 1.3-1.7 mg/kg b) Not applicable Dry wt	a) 1.5 mg/kg b) 5.7 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Catfish
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7014 Muscle	2	0.002-0.004 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7015 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.10 ug/g b) 0.10 ug/g c) 0.10 ug/g d) 0.10 ug/g e) 0.10 ug/g f) 0.10 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Little Pigeon Bayou d) Grand Lake e) Henderson Lake f) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin ES

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS

Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7016 Blood	a) 78 b) 18 Ingestion	a) Not given b) Not given	a) 0.002 ug/g b) 0.004 ug/g Wet wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7017 Blood	a) 9 b) 2 Ingestion	a) Not given b) Not given	a) 0.015 ug/100 ml b) 0.011 ug/100 ml	a) Sludge farms b) Control farms Cows on farms approximately 28 mo. Sludge farms received at least 2 annual applications. Detection limit 0.022 ug/100 ml. Ohio, Medina and Franklin-Pickaway Counties AAS

OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE

Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376

Tissue	Cases Exposure Route	Range	Mean	General Information
7018 Blood				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.

REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM

Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343

Tissue	Cases Exposure Route	Range	Mean	General Information
7019 Bone	85 Ingestion	a) 0.000-0.007 ug/g b) 0.012-0.071 ug/g c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given Dry wt	a) Not given b) Not given c) 0.46 ug/g d) 0.26 ug/g e) 1.3 ug/g f) 0.03 ug/g g) 1.2 ug/g h) 0.03 ug/g Dry wt	a) 1-4 mo old calves. Mothers grazing in untreated (control) pastures <= 6 yr, 6 cases b) 1-4 mo old calves, mothers grazing in pasture treated with anaerobically digested wastewater sludge (exposed), 9 cases c) 8-9 mo old calves, control mothers, 85 cases d) 8-9 mo old calves, exposed mothers, 70 cases e) Rib from 3 mo old calves, control mothers, 5 cases f) Rib from same calves at 15 mo g) Rib from 3 mo old calves, exposed mothers, 10 cases h) Rib from same calves at 15 mo.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7020 Bone	a) 62 b) 27 Ingestion	a) Not given b) Not given	a) 0.064 ug/g b) 0.245 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS
Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7021 Bone	10	<0.06-1.90 ug/g	Not given	Femurs, tibiae and ulnae. France, Sarthe AAS

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS
Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Tissue	Cases Exposure Route	Range	Mean	General Information
7022 Brain	a) 58 b) 26 Ingestion	a) Not given b) Not given	a) 0.02 ug/g b) 0.05 ug/g Dry wt	a) 8-9 mo old calves, mothers grazing in untreated pasture b) 8-9 mo old calves, mothers grazing in pastures treated with anaerobically digested wastewater sludges Grazing </= 6 yr in given pasture.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION
Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7023 Brain	a) 59 b) 24 Ingestion	a) Not given b) Not given	a) 0.055 ug/g b) 0.032 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7024 Brain	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.013 ug/g b) 0.013 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Tissue	Cases Exposure Route	Range	Mean	General Information
7025 Diaphragm	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 Ingestion	a) Not given b) Not given c) 0.019-0.069 ug/g d) 0.034-0.163 ug/g e) Not given f) Not given Dry wt	a) 0.138 ug/g b) 0.104 ug/g c) Not given d) Not given e) 0.08 ug/g f) 0.07 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7026 Diaphragm	a) 63 b) 29 Ingestion	a) Not given b) Not given	a) 0.076 ug/g b) 0.036 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7027 Hair	Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.129 ug/g b) 0.094 ug/g c) 0.098 ug/g d) 0.089 ug/g	a) Pre-sludge b) Post-sludge c) Control, "pre-sludge" d) Control, "post-sludge" Each value a mean of 48 calves from 4 farms over 3 yr from 1978-82. Duration of post-sludge phases was 3-8 mo. Control periods approx equal to sludge farm ones. Sludge treatment 2-10 metric tons/hectare, total applied 77.8 mg/kg. Detection limit 0.01 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS

OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE

Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376

Tissue	Cases Exposure Route	Range	Mean	General Information
7028 Hair				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.

REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM

Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7029 Heart	a) 5 b) 10 c) 6 d) 9 e) 34 f) 68 Ingestion	a) Not given b) Not given c) 0.026-0.088 ug/g d) 0.033-0.075 ug/g e) Not given f) Not given Dry wt	a) 0.060 ug/g b) 0.234 ug/g c) Not given d) Not given e) 0.12 ug/g f) 0.09 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7030 Heart	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 0.159 ug/g b) 0.050 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7031 Kidney	90	<0.1->1.9 ppm	0.54+/-0.66 mg/kg Wet wt	Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7032 Kidney	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 g) 5 h) 10 i) 5 j) 10 Ingestion	a) Not given b) Not given c) 0.069-0.469 ug/g d) 0.175-0.429 ug/g e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given Dry wt	a) 0.020 ug/g b) 0.033 ug/g c) Not given d) Not given e) 1.270 ug/g f) 9.180 ug/g g) 0.54 ug/g h) 12.1 ug/g i) 0.64 ug/g j) 8.9 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers g) At weaning (9 mo), mothers in control pastures h) Mothers in exposed pastures i) 150 d after weaning. Fed regular diet. From mothers in control pastures j) Same as i) except mothers in exposed pastures Significant difference between e) and f), $p<0.001$.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7033 Kidney	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 43.800 ug/g b) 8.869 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7034 Kidney	a) 36 b) 36 Ingestion	a) Not given b) Not given	a) 0.288 ug/g b) 0.174 ug/g	a) After 30-day waiting period, calves grazed on sewage sludge-treated pasture (2-10 metric tons/hectare, mean applied in 1978-82 was 77.8 mg/kg) b) Calves grazed on control, untreated pasture Detection limit 0.01 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS

OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE

Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7035 Kidney	Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 13.4 ug/g b) 16 ug/g c) 1.2 ug/g d) 14 ug/g e) 1.1 ug/g f) 2.4 ug/g g) 7.4 ug/g h) 54.0 ug/g i) 69.0 ug/g j) 3.5 ug/g k) 57.0 ug/g l) 64.0 ug/g Dry wt	a) Controls, range cattle b) Cattle grazed at Sludge disposal site (abandoned Lowry Bombing Range c) Young feed-lot steers, controls for d), fed no sludge d) Fed 3 mo with 12% Ft Collins sludge in diet e) Controls for f) f) As in d), Metro Denver sludge g) Control cows for h-i), fed no sludge h) Cows fed 9 mo with 12% Ft Collins sludge in diet i) As in h) plus 4-mo withdrawal j) Control steers for k-l) k) Steers, same as h) l) As in k) plus 4-mo withdrawal Data on soil samples, forages included. Colorado
CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; LIVER; KIDNEYS; CADMIUM; COPPER; ZINC; LEAD; IRON; DIETS; ANIMAL FEEDS; SEWAGE SLUDGE Baxter, J.C.; Johnson, D.; Burge, W.D.; Kienhols, E.; Cramer, W.N. 1983 EPA Report Number EPA-600/S2-83-012				

Tissue	Cases Exposure Route	Range	Mean	General Information
7036 Kidney				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.
REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343				

Tissue	Cases Exposure Route	Range	Mean	General Information
7037 Kidney	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.31 ug/g b) 2.0 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7038 Liver	229	a) 0.1-1.5 mg/kg b) Not detected Wet wt	a) Not given b) Not given	a) 65 cases b) 164 cases Detection limit 0.1 mg/L. Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES
BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION *Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565*				

Tissue	Cases Exposure Route	Range	Mean	General Information
7039 Liver	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 g) 5 h) 10 i) 5 j) 10 Ingestion	a) Not given b) Not given c) 0.032-0.144 ug/g d) 0.046-0.159 ug/g e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given Dry wt	a) 0.025 ug/g b) 0.022 ug/g c) Not given d) Not given e) 0.344 ug/g f) 1.839 ug/g g) 0.24 ug/g h) 3.28 ug/g i) 0.23 ug/g j) 1.27 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures </= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers g) At weaning (9 mo), mothers in control pastures h) Mothers in exposed pastures i) 150 d after weaning. Fed regular diet. From mothers in control pastures j) Same as i) except mothers in exposed pastures Significant difference between e) and f), p<0.001.
DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168				

Tissue	Cases Exposure Route	Range	Mean	General Information
7040 Liver	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 7.721 ug/g b) 1.086 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS
DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7041 Liver	a) 36 b) 36 Ingestion	a) Not given b) Not given	a) 0.107 ug/g b) 0.056 ug/g	a) After 30-day waiting period, calves grazed on sewage sludge-treated pasture (2-10 metric tons/hectare, mean applied in 1978-82 was 78.8 mg/kg) b) Calves grazed on control, untreated pasture Detection limit 0.003 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS

OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE

Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376

Tissue	Cases Exposure Route	Range	Mean	General Information
7042 Liver	Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.1 ug/g b) 0.8 ug/g c) 0.19 ug/g d) 4.9 ug/g e) 0.2 ug/g f) 0.4 ug/g Dry wt	a) Controls, range cattle b) Cattle grazed at sludge disposal site (abandoned Lowry Bombing Range) c) Young feed-lot steers, controls for d), fed no sludge d) Fed 3 mo with 12% Ft Collins sludge in diet e) Controls for f) f) As in d), Metro Denver sludge. Colorado

CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; LIVER; KIDNEYS; CADMIUM; COPPER; ZINC; LEAD; IRON; DIETS; ANIMAL FEEDS; SEWAGE SLUDGE

Baxter, J.C.; Johnson, D.; Burge, W.D.; Kienholz, E.; Cramer, W.N. 1983 EPA Report Number EPA-600/S2-83-012

Tissue	Cases Exposure Route	Range	Mean	General Information
7043 Liver				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.

REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM

Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7044 Liver	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.08 ug/g b) 1.5 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Tissue	Cases Exposure Route	Range	Mean	General Information
7045 Milk				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.
REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH Sherlock, J.C. 1984 Experientia 40(2):152-156				

Tissue	Cases Exposure Route	Range	Mean	General Information
7046 Milk	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.003 ug/g b) 0.002 ug/g Wet wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS
DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(8):703-707				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7047 Muscle	a) 36 b) 36 Ingestion	a) Not given b) Not given	a) 0.002 ug/g b) 0.002 ug/g	a) After 30-day waiting period, calves grazed on sewage sludge-treated pasture (2-10 metric tons/hectare, mean applied in 1978-82 was 77.8 mg/kg) b) Calves grazed on control, untreated pasture Detection limit 0.0002 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS
OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376				

Tissue	Cases Exposure Route	Range	Mean	General Information
7048 Muscle	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.02 ug/g b) 0.03 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
7049 Spleen	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.35 ug/g b) 0.24 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Cattle (ancient)

Tissue	Cases Exposure Route	Range	Mean	General Information
7050 Bone	2	0.11-0.25 ug/g	0.18 ug/g	Pleistocene (20-50,000 yr BP) metacarpals, Bovidae family. Collected from caves. Significance of sampling techniques, burial site conditions and other geochemical and geographic factors is discussed. Calculated mean. France; Poland AAS
BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Centipede
GEOPHILOMORPHA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7051 Body		Not given	28 mg/kg Dry wt	Collected June-Oct 79 at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Chickadee, Carolina
PARUS CAROLINENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7052 Body	1	Not applicable	1.7 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7053 Kidney	a) 18 b) 18 Ingestion	a) Not given b) Not given	a) 1.3+/-0.3 ppm b) 1.6+/-0.2 ppm Dry wt	a) Defined diet, controls b) Same diet plus 20% activated sludge (local wastewater treatment plant, Dan Region) 5 day olds, fed for 3 wk. Each value from duplicate determinations of 3 pools, 6 chicks/pool. Difference not significant. Israel AAS
7054 Liver	a) 18 b) 18 Ingestion	a) Not given b) Not given	a) 0.9+/-0.1 ppm b) 1.2+/-0.1 ppm Dry wt	a) Defined diet, controls b) Same diet plus 20% activated sludge (local wastewater treatment plant, Dan Region) 5 day olds, fed for 3 wk. Each value from duplicate determinations of 3 pools, 6 chicks/pool. Difference not significant. Israel AAS
DELIBERATE EXPOSURE; TERRESTRIAL; BIRDS; MAGNESIUM; MANGANESE; IRON; ZINC; COPPER; LEAD; CADMIUM; SEWAGE SLUDGE; BIOACCUMULATION Nachtomi, E.; Lipstein, B.; Iosif, B.; Alumot, E. 1984 Nutrition Reports International 29(3):511-517				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Chicken, white leghorn
GALLUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7055 Bone	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) <0.062 mg/kg b) 0.145 mg/kg c) <0.062 mg/kg d) 0.152 mg/kg e) 0.073 mg/kg f) 0.221 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS
7056 Brain	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) <0.062 mg/kg b) 0.101 mg/kg c) <0.062 mg/kg d) <0.092 mg/kg e) 0.070 mg/kg f) <0.092 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS
7057 Crop	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) <0.062 mg/kg b) 0.243 mg/kg c) 0.198 mg/kg d) 0.400 mg/kg e) 0.329 mg/kg f) 0.528 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Chicken, white leghorn
GALLUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7058 Duodenum	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.43 mg/kg b) 0.52 mg/kg c) 1.31 mg/kg d) 1.23 mg/kg e) 2.18 mg/kg f) 1.98 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS
7059 Eggs	Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) <0.062 mg/kg b) <0.062 mg/kg c) 0.303 mg/kg d) <0.062 mg/kg e) <0.062 mg/kg f) 0.325 mg/kg g) <0.062 mg/kg h) <0.062 i) 0.347 mg/kg Dry wt	a) Low-Cd diet, 0.08-0.13 mg/kg ration, white b) Yolk c) Shell d) Medium-Cd diet, 0.46-0.76 mg/kg ration, white e) Yolk f) Shell g) High-Cd diet, 0.77-1.08 mg/kg ration, white h) Yolk i) Shell At 54 wk after laying began. Hyline W36 commercial hybrid pullets, in controlled quarters. Results at 6-41 wk also given. AAS
7060 Feathers	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.170 mg/kg b) 0.073 mg/kg c) 0.165 mg/kg d) 0.100 mg/kg e) 0.218 mg/kg f) 0.155 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Chicken, white leghorn
GALLUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7061 Gizzard	162 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given m) Not given n) Not given o) Not given p) Not given q) Not given r) Not given	a) 0.72 mg/kg b) 0.87 mg/kg c) 1.03 mg/kg d) 1.11 mg/kg e) 3.19 mg/kg f) 4.69 mg/kg g) 4.27 mg/kg h) 6.06 mg/kg i) 4.54 mg/kg j) 6.90 mg/kg k) 9.34 mg/kg l) 9.96 mg/kg m) 1.39 mg/kg n) 2.08 mg/kg o) 8.78 mg/kg p) 9.14 mg/kg q) 13.60 mg/kg r) 15.00 mg/kg Dry wt	a) 8 wk, low-Cd diet, 0.08-0.13 mg/kg ration, muscle, 16 cases b) 20 wk, 12 cases c) 50 wk, 16 cases d) 80 wk, 10 cases e) 8 wk, medium-Cd diet, 0.46-0.76 mg/kg ration, 16 cases f) 20 wk, 12 cases g) 50 wk, 16 cases h) 80 wk, 10 cases i) 8 wk, high-Cd diet, 0.77-1.08 mg/kg ration, 16 cases j) 20 wk, 12 cases k) 50 wk, 16 cases l) 80 wk, 10 cases m) 50 wk, low-Cd diet, lining n) 80 wk o) 50 wk, med-Cd diet p) 80 wk q) 50 wk, high-Cd diet r) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low and low to high Cd diet also given. Fat-extracted tissue samples. AAS
7062 Heart	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) <0.062 mg/kg b) <0.077 mg/kg c) <0.062 mg/kg d) <0.077 mg/kg e) 0.188 mg/kg f) 0.114 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. Fat-extracted tissue samples. AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Chicken, white leghorn
GALLUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7063 Kidney	a) 16 b) 12 c) 16 d) 10 e) 16 f) 12 g) 16 h) 10 i) 16 j) 12 k) 16 l) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 0.30 mg/kg b) 0.99 mg/kg c) 4.6 mg/kg d) 9.5 mg/kg e) 1.76 mg/kg f) 7.64 mg/kg g) 21.8 mg/kg h) 45.8 mg/kg i) 3.21 mg/kg j) 13.60 mg/kg k) 36.8 mg/kg l) 69.5 mg/kg Dry wt	a) 8 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 20 wk c) 50 wk d) 80 wk e) 8 wk, medium-Cd diet, 0.46-0.76 mg/kg ration f) 20 wk g) 50 wk h) 80 wk i) 8 wk, high-Cd diet, 0.77-1.08 mg/kg ration j) 20 wk k) 50 wk l) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low and low to high Cd diet also given. Fat-extracted tissue samples. AAS
7064 Liver	a) 16 b) 12 c) 16 d) 10 e) 16 f) 12 g) 16 h) 10 i) 16 j) 12 k) 16 l) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 0.176 mg/kg b) 0.35 mg/kg c) 0.90 mg/kg d) 1.43 mg/kg e) 0.746 mg/kg f) 2.17 mg/kg g) 3.57 mg/kg h) 4.86 mg/kg i) 1.170 mg/kg j) 3.55 mg/kg k) 6.18 mg/kg l) 6.66 mg/kg Dry wt	a) 8 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 20 wk c) 50 wk d) 80 wk e) 8 wk, medium-Cd diet, 0.46-0.76 mg/kg ration f) 20 wk g) 50 wk h) 80 wk i) 8 wk, high-Cd diet, 0.77-1.08 mg/kg ration j) 20 wk k) 50 wk l) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low and low to high Cd diet also given. Fat-extracted tissue samples. AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Chicken, white leghorn
GALLUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7065 Lung	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) <0.062 mg/kg b) <0.098 mg/kg c) 0.128 mg/kg d) 0.149 mg/kg e) 0.319 mg/kg f) 0.277 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS
7066 Muscle	106 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given m) Not given n) Not given o) Not given p) Not given	a) 0.134 mg/kg b) <0.062 mg/kg c) 0.095 mg/kg d) <0.062 mg/kg e) <0.062 mg/kg f) 0.109 mg/kg g) 0.112 mg/kg h) <0.062 mg/kg i) 0.111 mg/kg j) <0.062 mg/kg k) 0.110 mg/kg l) 0.113 mg/kg m) <0.062 mg/kg n) 0.121 mg/kg o) 0.163 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration, breast, 16 cases b) 80 wk, 12 cases c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration, 16 cases d) 80 wk, 10 cases e) 8 wk, high-Cd diet, 0.77-1.08 mg/kg ration, 16 cases f) 20 wk, 12 cases g) 50 wk, 16 cases h) 80 wk, 10 cases i) 50 wk, low-Cd diet, leg j) 80 wk k) 50 wk, med-Cd diet l) 80 wk m) 8 wk, high-Cd diet n) 20 wk o) 50 wk p) 80 wk Weeks after hatching. Hyline W36 commercial hyb:id pullets, in controlled quarters. Levels after switch from high to low and low to high Cd diet also given. Fat-extracted tissue samples. AAS
7067 Pancreas	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.30 mg/kg b) 0.37 mg/kg c) 1.85 mg/kg d) 1.86 mg/kg e) 2.90 mg/kg f) 2.78 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. Fat-extracted tissue samples. AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Chicken, white leghorn
GALLUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7068 Proventriculus	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.23 mg/kg b) 0.29 mg/kg c) 0.80 mg/kg d) 1.16 mg/kg e) 1.32 mg/kg f) 1.83 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS
7069 Spleen	a) 16 b) 10 c) 16 d) 10 e) 16 f) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.35 mg/kg b) 0.36 mg/kg c) 1.58 mg/kg d) 1.19 mg/kg e) 1.56 mg/kg f) 1.49 mg/kg Dry wt	a) 50 wk, low-Cd diet, 0.08-0.13 mg/kg ration b) 80 wk c) 50 wk, medium-Cd diet, 0.46-0.76 mg/kg ration d) 80 wk e) 50 wk, high-Cd diet, 0.77-1.08 mg/kg ration f) 80 wk Weeks after hatching. Hyline W36 commercial hybrid pullets, in controlled quarters. Levels after switch from high to low or low to high Cd diet at 50 wk also given. AAS
EGGS; BRAIN; MUSCLES; CROP; DUODENUM; FEATHERS; BONES; GIZZARDS; HEART; KIDNEYS; LIVER; LUNGS; PANCREAS; PROVENTRICULUS; SPLEEN; BIRDS; TERRESTRIAL; JUVENILES; ADULTS; CADMIUM; ANIMAL FEEDS; BIOACCUMULATION; SEWAGE; DELIBERATE EXPOSURE Hinesly, T.D.; Hansen, L.G.; Bray, D.J.; Redborg, K.E. 1985 Journal of Agricultural and Food Chemistry 33:173-180				

Cicada
MAGICICADA REPTENDECIM

Tissue	Cases Exposure Route	Range	Mean	General Information
7070 Body, whole		a) Not given b) Not given	a) 2.7 mg/kg b) 2.4 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam
CORBICULA FLUMINEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7071 Body		a) 2.9+/-0.20-3.70+/-0.40 ug/g b) 2.92+/-0.10-4.65+/-0.45 ug/g c) 3.33+/-0.61-4.37+/-0.81 ug/g d) 2.37+/-0.15-3.42+/-0.24 ug/g Dry wt S.E. Ranges of means	a) Not given b) Not given c) Not given d) Not given	a) Controls, 100% clean sand, peak d 96+136 b) 10% contaminated sediment (v/v). Day 3 and d 96+136, peak d 96+136 c) 50% contaminated sediment. Day 3 and d 96+136, peak d 96+136 d) 100% contaminated sediment. Day 3 and d 96+136, peak 4.05 ug/g d 51 Exposed for 48 d to sediment, from Sheboygan River, WI, containing environmental contaminants. 88-d depuration followed. Background levels in animals 3.8+/-.19 ug/g dry wt prior to experiment.
MOLLUSKS; AQUATIC; DELIBERATE EXPOSURE; WATER POLLUTION; LEAD; CADMIUM; POLYCHLORINATED BIPHENYLS; JUVENILES; CRUSTACEANS Tatem, H.E. 1986 Archives of Environmental Contamination and Toxicology 15:171-183				

Tissue	Cases Exposure Route	Range	Mean	General Information
7072 Body		a) Not given b) Not given	a) 0.90+/-0.50 ppm b) 0.90+/-0.44 ppm Dry wt	Samples collected from entrance of the Chef Menteur Pass Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS
MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158				

Clam (A. anatina)
ANODONTA ANATINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7073 Body, whole	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0 ug/g b) 30 ug/g c) 80 ug/g Dry wt	a) Initial value b) 8 wk c) 22 wk Exposure to 25 ppb in water. Biphasic accumulation. Distribution at tissue and subcellular levels also reported. Values estimated from figure. Netherlands, Leiden AAS

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Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (A. anatina)
ANODONTA ANATINA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7074 Gills	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0 ug/g b) 110 ug/g c) 210 ug/g Dry wt	a) Initial value b) 8 wk c) 22 wk Exposed to 29 ppb in water. Multiphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Leiden AAS
7075 Kidney	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 10 ug/g b) 60 ug/g c) 300 ug/g Dry wt	a) Initial value b) 4 wk c) 16 wk Exposed to 29 ppb in water. Multiphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Leiden AAS
7076 Mantle	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0 ug/g b) 10 ug/g c) 90 ug/g Dry wt	a) Initial value b) 3 wk c) 16 wk Exposed to 29 ppb in water. Mantle-edge. Multiphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Leiden AAS
7077 Midgut gland	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0 ug/g b) 15 ug/g c) 130 ug/g Dry wt	a) Initial value b) 4 wk c) 16 wk Exposed to 29 ppb in water. Multiphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Leiden AAS

BODY; GILLS; KIDNEYS; MIDGUT GLAND; MANTLE; CLAMS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; NETHERLANDS; AQUATIC; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION

Hemelraad, J.; Holwerda, D.A.; Teerds, K.J.; Herwig, H.J.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:9-21

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (A. cygnea)
ANODONTA CYGNEA ZELLENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7078 Body, whole	a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2 ug/g b) 10 ug/g c) 35 ug/g d) 2 ug/g e) 30 ug/g f) 55 ug/g Dry wt	a) Initial value b) 3 wk. Water concentration 29 ppb c) 22 wk d) Initial value. 55 ppb in water e) 6 wk f) 11 wk Biphasic accumulation. a)-c) exposed 6-11/84, d)-f) 11/83-2/84. Distribution on tissue and subcellular levels also reported. Values estimated from figures. Netherlands, Maarsseveen-lake district AAS
BODY; GILLS; KIDNEYS; MIDGUT GLAND; MANTLE; CLAMS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; NETHERLANDS; AQUATIC; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION Hemelraad, J.; Holwerda, D.A.; Teerds, K.J.; Herwig, H.J.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:9-21				

Tissue	Cases Exposure Route	Range	Mean	General Information
7079 Foot	a) 4 b) 4	a) Not given b) Not given	a) 0.54 ug/g b) 10 ug/g Dry wt	a) Initial value b) 22 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Some values estimated from figure. Netherlands, Maarsseveen-lake district AAS
7080 Gills	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 1.89 ug/g b) 30 ug/g c) 170 ug/g Dry wt	a) Initial level b) 4 wk c) 10 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Biphasic accumulation, plateaus at 4-6 wk and 10-12 wk. Concentration factor 10(E+3) to 10(E+4). Linear accumulation observed at 5 ug/L dose. Some values estimated from figures. Netherlands, Maarsseveen-lake district AAS
MIDGUT GLAND; KIDNEYS; LABIAL PALPS; GILLS; GUT; GONADS; CLAMS; AQUATIC; DELIBERATE EXPOSURE; NETHERLANDS; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION Hemelraad, J.; Holwerda, A.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:1-7				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (A. cygnea)
ANODONTA CYGNEA ZELLENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7081 Gills	a) 4 b) 4 c) 4 d) 4 e) 4	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0 ug/g b) 15 ug/g c) 55 ug/g d) 50 ug/g e) 100 ug/g Dry wt	a) Initial value b) 3 wk. Water concentration 29 ppb c) 8 wk d) 4 wk. 55 ppb in water e) 11 wk Multiphasic accumulation. a)-c) exposed 6-11/84, d)-e) 11/83-2/84. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figures. Netherlands, Maarsseveen-lake district AAS
BODY; GILLS; KIDNEYS; MIDGUT GLAND; MANTLE; CLAMS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; NETHERLANDS; AQUATIC; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION Hemelraad, J.; Holwerda, D.A.; Teerds, K.J.; Herwig, H.J.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:9-21				

Tissue	Cases Exposure Route	Range	Mean	General Information
7082 Gonads	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0.58 ug/g b) 10 ug/g c) 30 ug/g Dry wt	a) Initial level b) 2 wk c) 10 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Biphasic accumulation, plateaus at 4-6 wk and 10-12 wk. Concentration factor 10(E+3) to 10(E+4). Linear accumulation observed at 5 ug/L dose. Some values estimated from figures. Reported as guts/gonads complex. Netherlands, Maarsseveen-lake district AAS
7083 Gut	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0.58 ug/g b) 10 ug/g c) 30 ug/g Dry wt	a) Initial level b) 2 wk c) 10 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Biphasic accumulation, plateaus at 4-6 wk and 10-12 wk. Concentration factor 10(E+3) to 10(E+4). Linear accumulation observed at 5 ug/L dose. Some values estimated from figures. Reported as guts/gonads complex. Netherlands, Maarsseveen-lake district AAS

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Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (A. cygnea)
ANODONTA CYGNEA ZELLENSIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7084 Kidney	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 16.2 ug/g b) 30 ug/g c) 72 ug/g Dry wt	a) Initial level b) 4 wk c) 22 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Biphasic accumulation, plateaus at 4-6 wk and 10-12 wk. Concentration factor 10(E+3) to 10(E+4). Linear accumulation observed at 5 ug/L dose. Some values estimated from figures. Netherlands, Maarsseveen-lake district AAS
MIDGUT GLAND; KIDNEYS; LABIAL PALPS; GILLS; GUT; GONADS; CLAMS; AQUATIC; DELIBERATE EXPOSURE; NETHERLANDS; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION Hemelraad, J.; Holwerda, A.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:1-7				

Tissue	Cases Exposure Route	Range	Mean	General Information
7085 Kidney	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 10 ug/g b) 30 ug/g c) 40 ug/g Dry wt	a) Initial value b) 3 wk c) 22 wk Exposed to 29 ppb in water. Multiphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Maarsseveen-lake district AAS
BODY; GILLS; KIDNEYS; MIDGUT GLAND; MANTLE; CLAMS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; NETHERLANDS; AQUATIC; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION Hemelraad, J.; Holwerda, D.A.; Teerds, K.J.; Herwig, H.J.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:9-21				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (A. cygnea)
ANODONTA CYGNEA ZELLENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7086 Labial palps	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 1.98 ug/g b) 40 ug/g c) 120 ug/g Dry wt	a) Initial level b) 4 wk c) 22 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Biphasic accumulation, plateaus at 4-6 wk and 10-12 wk. Concentration factor 10(E+3) to 10(E+4). Linear accumulation observed at 5 ug/L dose. Some values estimated from figures. Netherlands, Maarsseveen-lake district AAS
7087 Mantle	a) 4 b) 4 c) 4 d) 4 e) 4 f) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.94 ug/g b) 55 ug/g c) 70 ug/g d) 1.00 ug/g e) 60 ug/g f) 90 ug/g Dry wt	a) Initial value b) 10 wk c) 22 wk d) Initial value, mantle edge e) 10 wk f) 22 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Sigmoid accumulation pattern. Concentration factor 10(E+3) to 10(E+4). Biphasic accumulation observed at 5 ug/L dose. Some values estimated from figure. Netherlands, Maarsseveen-lake district AAS

MIDGUT GLAND; KIDNEYS; LABIAL PALPS; GILLS; GUT; GONADS; CLAMS; AQUATIC; DELIBERATE EXPOSURE; NETHERLANDS; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION
Hemelraad, J.; Holwerda, A.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:1-7

Tissue	Cases Exposure Route	Range	Mean	General Information
7086 Mantle	a) 4 b) 4 c) 4 d) 4 e) 4	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0 ug/g b) 20 ug/g c) 45 ug/g d) 45 ug/g e) 110 ug/g Dry wt	a) Initial value b) 4 wk. Water concentration 29 ppb c) 16 wk d) 6 wk. 55 ppb in water e) 11 wk Multiphasic accumulation. a)-c) exposed 6-11/84, d)-e) 11/83-2/84. a)-c) in mantle-edge. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figures. Netherlands, Maarsseveen-lake district AAS

BODY; GILLS; KIDNEYS; MIDGUT GLAND; MANTLE; CLAMS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; NETHERLANDS; AQUATIC; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION
Hemelraad, J.; Holwerda, D.A.; Teerds, K.J.; Herwig, H.J.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:9-21

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (A. cygnea)
ANODONTA CYGNEA ZELLENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7089 Midgut gland	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 6.77 ug/g b) 20 ug/g c) 40 ug/g Dry wt	a) Initial level b) 4 wk c) 18 wk Animals collected 10/83. Exposed to 25 ug/L, not fed. Biphasic accumulation, plateaus at 4-6 wk and 10-12 wk. Concentration factor 10(E+3) to 10(E+4). Linear accumulation observed at 5 ug/L dose. Some values estimated from figures. Netherlands, Maarsseveen-lake district AAS

MIDGUT GLAND; KIDNEYS; LABIAL PALPS; GILLS; GUT; GONADS; CLAMS; AQUATIC; DELIBERATE EXPOSURE; NETHERLANDS; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION
Hemelraad, J.; Holwerda, A.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:1-7

Tissue	Cases Exposure Route	Range	Mean	General Information
7090 Midgut gland	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 5 ug/g b) 15 ug/g c) 20 ug/g Dry wt	a) Initial value b) 5 wk c) 16 wk Exposed to 29 ppb in water. Multiphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Maarsseveen-lake district AAS

BODY; GILLS; KIDNEYS; MIDGUT GLAND; MANTLE; CLAMS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; NETHERLANDS; AQUATIC; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION
Hemelraad, J.; Holwerda, D.A.; Teerds, K.J.; Herwig, H.J.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:9-21

Clam (M. balthica)
MACOMA BALTHICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7091 Body	a) 5 b) 6 c) 5 d) 4 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.42+/-0.03 ug/g b) 0.36+/-0.01 ug/g c) 0.63+/-0.06 ug/g d) 0.30+/-0.01 ug/g e) 0.23+/-0.06 ug/g S.E. Dry wt	a) Mouth of Patapso River, near Baltimore b) Chester River c) Mouth of Port Tobacco River d) Mid-section of York River e) Between mid-section and mouth of York River Soft tissues, each sample a pool of several clams, collected in fall 1979-81. Chesapeake Bay region

CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING
Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (M. lateralis)
MULINEA LATERALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7092 Body	5	Not given	0.35+/-0.02 ug/g S.E. Dry wt	Soft tissues, each sample a pool of several clams, collected in fall 1979-81, southeastern shore. Chesapeake Bay region
CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274				

Clam (R. cuneata)
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7093 Body	a) 5 b) 5 c) 6 d) 4 e) 8 f) 5 g) 6 h) 4 i) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 0.23+/-0.03 ug/g b) 0.49+/-0.06 ug/g c) 0.56+/-0.05 ug/g d) 1.43+/-0.20 ug/g e) 0.98+/-0.15 ug/g f) 0.71+/-0.04 ug/g g) 0.47+/-0.09 ug/g h) 0.96+/-0.17 ug/g i) 0.40+/-0.02 ug/g S.E. Dry wt	a) Lower Choptank River b) Mouth of Port Tobacco River c) Potomac River, downstream from Port Tobacco River d) Mattaponi River e) Pamunky River f) Mid-section of York River g) Mouth of Chickahominy River h) James River, downstream from Chickahominy River i) James River, between Chickahominy River and Norfolk Soft tissue, each sample a pool of several clams, collected in fall 1979-81. Chesapeake Bay region
CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274				

Clam (U. pictorum)
UNIO PICTORUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7094 Body, whole	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0 ug/g b) 35 ug/g c) 65 ug/g Dry wt	a) Initial value b) 4 wk c) 11 wk Exposed to 55 ppb in water. Biphasic accumulation. Distribution on tissue and subcellular levels also reported. Values estimated from figure. Netherlands, Maarsseveen-lake district AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Clam (U. pictorum)
UNIO PICTORUM

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7095 Gills	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0 ug/g b) 120 ug/g c) 275 ug/g Dry wt	a) Initial value b) 4 wk c) 11 wk Exposed to 55 ppb in water. Biphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Maarsseveen-lake district AAS
7096 Mantle	a) 4 b) 4 c) 4	a) Not given b) Not given c) Not given	a) 0 ug/g b) 30 ug/g c) 45 ug/g Dry wt	a) Initial value b) 4 wk c) 11 wk Exposed to 55 ppb in water. Biphasic accumulation. Normalized burden (ug/g body wt) and subcellular distribution also reported. Values estimated from figure. Netherlands, Maarsseveen-lake district AAS
BODY; GILLS; KIDNEYS; MIDGUT GLAND; MANTLE; CLAMS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; NETHERLANDS; AQUATIC; CADMIUM; BIOACCUMULATION; BIOCONCENTRATION Hemelraad, J.; Holwerda, D.A.; Teerds, K.J.; Herwig, H.J.; Zandee, D.I. 1986 Archives of Environmental Contamination and Toxicology 15:9-21				

Clam, soft-shelled
MYA ARENARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
7097 Body	a) 7 b) 5	a) Not given b) Not given	a) 0.19+/-0.01 ug/g b) 0.41+/-0.02 ug/g S.E. Dry wt	a) Mouth of Potomac River b) Mouth of James River Soft tissues, each sample a pool of several clams, collected in fall 1979-81. Chesapeake Bay region
CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
7098 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH

Sherlock, J.C. 1984 Experientia 40(2):152-156

Tissue	Cases Exposure Route	Range	Mean	General Information
7099 Body	17	<0.001-0.010 mg/kg Wet wt	0.002 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-84. Netherlands DPASV

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Tissue	Cases Exposure Route	Range	Mean	General Information
7100 Liver		a) 0.22-0.91 mg/kg b) 0.06-0.70 mg/kg c) 0.11-3.9 mg/kg d) 0.07-5.40 mg/kg e) 0.01-2.20 mg/kg f) 0.05-1.5 mg/kg Dry wt	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) From Fladen, 1980, 23.3-27.6 cm long, 191-275 g, 7.43-55.7% fat b) 1981, 25.0-27.5 cm, 185-224 g, 2.33-18.5% fat c) 1982, 23.5-26.9 cm, 168-255 g, 2.79-40.5% fat d) From SE Gotland, 1980, 25.3-35.5 cm, 243-625 g, 2.88-64.1% fat e) 1981, 24.5-38.5 cm, 253-700 g, 262-69.0% fat f) 1982, 24.3-33.5 cm, 193-480 g, 3.03-68.3% fat Concluded metal levels dependent on fat content. Kattegat (south of Fladen); Baltic (southeast of Gotland) AAS

LIVER; COPPER; ZINC; CADMIUM; LEAD; ENVIRONMENTAL EXPOSURE; SWEDEN; METALS; FISHES; AQUATIC; WATER POLLUTION

Grimas, U.; Gothberg, A.; Notter, M.; Olsson, M.; Reutergardh, L. 1985 Ambio 14(3):175-178

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Coot, American
FULICA AMERICANA

Tissue	Cases Exposure Route	Range	Mean	General Information
7101 Liver	a) 19 b0 10 c) 79 d) 40	a) Not detected-0.38 ppm b) Not detected-0.32 ppm c) Not detected-2.2 ppm d) Not detected-22 ppm Wet wt	a) 0.11 ppm b) 0.07 ppm c) 0.34 ppm d) 0.18 ppm Wet wt Geometric	a) 1 yr before startup, power plant site b) Control site, same as a) c) Range from 6 mo-2 yr post-startup, power plant site d) Control site, same as c) Values in c), d) Compiled by extractor Significant differences between power plant, control sites at 6 mo post-startup (0.73 and 0.15 ppm, respectively). Study was to determine levels at coal-fired power plant ash pond and control site (Port Mansfield). Pre-startup samples in 8, 10, 11/79 and post-startup samples for 2 yr after 10/80. Detection limits, entire study, 0.1-0.2 ppm. Texas Goliad County, Fannin; Texas, Port Mansfield AAS
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; FOSSIL FUELED POWER PLANTS; TEXAS; COPPER; ZINC; NICKEL; CADMIUM; MERCURY; MOLYBDENUM; LEAD; ARSENIC; SELENIUM; KIDNEYS; BONES; LIVER White, D.H.; King, K.A.; Mitchell, C.A.; Mulhern, B.M. 1986 Bulletin of Environmental Contamination and Toxicology 36:376-383				

Copepod

Tissue	Cases Exposure Route	Range	Mean	General Information
7102 Body				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Crab

Tissue	Cases Exposure Route	Range	Mean	General Information
7103 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.
REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH Sherlock, J.C. 1984 Experientia 40(2):152-156				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Crab

Tissue	Cases Exposure Route	Range	Mean	General Information
7104 Hepatopancreas		a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 3.5 ppm b) 11.7 ppm c) 27.2 ppm d) 7.5 ppm Wet wt	a) 1 wk after 3 doses of 5 mg/kg/wk b) 2 wk after third dose c) 3 wk after d) 17 wk after Intramuscular injection of copper sulfate in 1.1% sodium chloride. Metallothioneins isolated and analyzed for Cu and Cd in these animals, and in another group pretreated with cadmium. Scotland, Aberdeen AAS
HEPATOPANCREAS; AQUATIC; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; COPPER; CADMIUM; ZINC; BIOACCUMULATION; MINERAL METABOLISM; CRABS; CRUSTACEANS Overnell, J. 1982 Comparative Biochemistry and Physiology 73 B(3):555-564				

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7105 Muscle	2	0.002-0.003 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7106 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.10 ug/g b) 0.10 ug/g c) 0.10 ug/g d) 0.10 ug/g e) 0.10 ug/g f) 0.13 ug/g Wet wt Geometric	a) Composite samples from Lake Fausse Point b) Little Pigeon Bayou c) Henderson Lake d) Bayou Petite Prairie e) Spring Bayou f) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin ES
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C
Crayfish
ORCONECTES VIRILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7107 Antennal gland	a) 17 b) 17 c) 17 d) 17 e) 17 f) 17	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 181.9+/-99.9 ug/g b) 143.5+/-85.0 ug/g c) 84.7+/-37.0 ug/g d) 95.3+/-51.2 ug/g e) 39.9+/-28.9 ug/g f) 5.8+/-4.6 ug/g	a) 7.2 mg/L b) 4.4 mg/L c) 2.4 mg/L d) 1.1 mg/L e) 0.4 mg/L Exposure levels. Measurements after 2 wk. Colorado, Fort Collins, Horsetooth Reservoir AAS
7108 Body, whole	a) 17 b) 17 c) 17 d) 17 e) 17 f) 17	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 146.6+/-47.6 ug/g b) 98.0+/-18.5 ug/g c) 89.0+/-23.5 ug/g d) 55.9+/-15.9 ug/g e) 28.4+/-8.7 ug/g f) 4.3+/-1.3 ug/g	a) 7.2 mg/L b) 4.4 mg/L c) 2.4 mg/L d) 1.1 mg/L e) 0.4 mg/L Exposure levels. Measurements after 2 wk. Colorado, Fort Collins, Horsetooth Reservoir AAS
7109 Carapace	a) 17 b) 17 c) 17 d) 17 e) 17 f) 17	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 25.8+/-12.4 ug/g b) 28.3+/-9.4 ug/g c) 16.6+/-4.6 ug/g d) 17.4+/-8.1 ug/g e) 4.9+/-1.4 ug/g f) 1.2+/-0.65 ug/g	a) 7.2 mg/L b) 4.4 mg/L c) 2.4 mg/L d) 1.1 mg/L e) 0.4 mg/L Exposure levels. Measurements after 2 wk. Colorado, Fort Collins, Horsetooth Reservoir AAS

DELIBERATE EXPOSURE; AQUATIC; CRAYFISHES; BODY; GILLS; HEPATOPANCREAS; MUSCLES; CARAPACE; ANTENNAL GLANDS; CADMIUM; BIOACCUMULATION; WATER POLLUTION; COLORADO

Mirenda, R.J. 1986 Archives of Environmental Contamination and Toxicology 15:401-407

Tissue	Cases Exposure Route	Range	Mean	General Information
7110 Gills	51	a) 2.40+/-0.61-6.91+/-6.20 ug/g b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given Dry wt	a) Not given b) 19.7+/-14.84 ug/g c) 41.46+/-34.04 ug/g d) 125.64+/-97.31 ug/g e) 204.04+/-261.5 ug/g f) 2.60+/-1.69 ug/g g) 44.55+/-46.12 ug/g h) 155.38+/-133.12 ug/g i) 179.36+/-81.19 ug/g Dry wt	a) Controls, no added Cd, 21 d, range of means, 4 cases b) 5 ug/l, d 1, 5 cases c) Day 7, 5 cases d) Day 14, 4 cases e) Day 21, 4 cases f) 10 ug/l, d 1, 4 cases g) Day 7, 4 cases h) Day 14, 5 cases i) Day 21, 4 cases In flow-through outdoor water tanks with 2 cm well-water. Data given on respiration and ATP levels. South Carolina, Savannah River Plant

GILLS; MUSCLES; AQUATIC; CRUSTACEANS; DELIBERATE EXPOSURE; SOUTH CAROLINA; CADMIUM; ZINC

Dickson, G.W.; Giesy, J.P.; Briese, L.A. 1982 Environmental Toxicology and Chemistry 1:147-156

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Crayfish
ORCONECTES VIRILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7111 Gills	a) 17 b) 17 c) 17 d) 17 e) 17 f) 17	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1823.9+/-645.7 ug/g b) 1265.3+/-442.8 ug/g c) 1124.2+/-321.3 ug/g d) 550.8+/-287.5 ug/g e) 225.3+/-137.3 ug/g f) 5.3+/-3.5 ug/g	a) 7.2 mg/L b) 4.4 mg/L c) 2.4 mg/L d) 1.1 mg/L e) 0.4 mg/L Exposure levels. Measurements after 2 wk. Colorado, Fort Collins, Horsetooth Reservoir Increasing sensitivity with time: LC50 at 96 hr was 6.1 mg/L, at 14d 0.70 mg/L AAS

DELIBERATE EXPOSURE; AQUATIC; CRAYFISHES; BODY; GILLS; HEPATOPANCREAS; MUSCLES; CARAPACE; ANTENNAL GLANDS; CADMIUM; BIOACCUMULATION; WATER POLLUTION; COLORADO

Mirenda, R.J. 1986 Archives of Environmental Contamination and Toxicology 15:401-407

Tissue	Cases Exposure Route	Range	Mean	General Information
7112 Hepatopancreas		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given m) Not given	a) 0.3 ug/g b) 0.2 ug/g c) 0.8 ug/g d) 6.5 ug/g e) 1.1 ug/g f) 0.4 ug/g g) 0.3 ug/g h) 0.7 ug/g i) 0.6 ug/g j) 0.6 ug/g k) 0.6 ug/g l) 0.3 ug/g m) 0.29+/-0.04 ug/g (S.E.) Wet wt	a) Northern site, Lake Oren b) Southern site c) Northern site, Lake Risten d) Middle site e) Southern site f) Northern site, Lake Borken g) Southern site h) Northern site, Lake Sakern i) Middle site j) Southern site k) Lake Yxningen l) Lake Kvarnsjon m) Controls 3-5 animals/value, 9 control animals d, e) calculated by extractor. All lakes receive leached metals from waste tips at old copper mine in Bersbo. Sweden, Bersbo area AAS

CADMIUM; ZINC; COPPER; CRAYFISH; HEPATOPANCREAS; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MINING; SWEDEN; AQUATIC; INSECTS; LARVAE

Lundholm, C.E.; Andersson, L. 1985 Ambio 14(3):167-172

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Crayfish
ORCONECTES VIRILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7113 Hepatopancreas	a) 17 b) 17 c) 17 d) 17 e) 17 f) 17	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 369.3+/-126.7 ug/g b) 361.6+/-274.7 ug/g c) 295.2+/-208.7 ug/g d) 144.7+/-96.5 ug/g e) 90.7+/-60.5 ug/g f) 4.8+/-3.2 ug/g	a) 7.2 mg/L b) 4.4 mg/L c) 2.4 mg/L d) 1.1 mg/L e) 0.4 mg/L Exposure levels. Measurements after 2 wk. Colorado, Fort Collins, Horsetooth Reservoir AAS

DELIBERATE EXPOSURE; AQUATIC; CRAYFISHES; BODY; GILLS; HEPATOPANCREAS; MUSCLES; CARAPACE; ANTENNAL GLANDS; CADMIUM; BIOACCUMULATION; WATER POLLUTION; COLORADO

Mirenda, R.J. 1986 Archives of Environmental Contamination and Toxicology 15:401-407

Tissue	Cases Exposure Route	Range	Mean	General Information
7114 Muscle	51	a) 0.19+/-0.08-5.90+/-6.73 ug/g b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given Dry wt	a) Not given b) 1.59+/-1.87 ug/g c) 4.11+/-4.65 ug/g d) 3.35+/-3.76 ug/g e) 7.10+/-5.06 ug/g f) 0.35+/-0.36 ug/g g) 0.32+/-0.07 ug/g h) 4.65+/-7.98 ug/g i) 1.05+/-1.49 ug/g Dry wt	a) Controls, no added Cd, 21 d, range of means, 4 cases b) 5 ug/l, d 1, 5 cases c) Day 7, 5 cases d) Day 14, 4 cases e) Day 21, 4 cases f) 10 ug/l, d 1, 4 cases g) Day 7, 4 cases h) Day 14, 5 cases i) Day 21, 4 cases In flow-through outdoor water tanks with 2 cm well-water. Data given on respiration and ATP levels. South Carolina, Savannah River Plant

GILLS; MUSCLES; AQUATIC; CRUSTACEANS; DELIBERATE EXPOSURE; SOUTH CAROLINA; CADMIUM; ZINC

Dickson, G.W.; Giesy, J.P.; Briese, L.A. 1982 Environmental Toxicology and Chemistry 1:147-156

Tissue	Cases Exposure Route	Range	Mean	General Information
7115 Muscle	a) 17 b) 17 c) 17 d) 17 e) 17 f) 17	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 20.2+/-11.7 ug/g b) 21.7+/-15.9 ug/g c) 19.3+/-3.0 ug/g d) 18.2+/-7.6 ug/g e) 3.9+/-3.6 ug/g f) 0.4+/-0.01 ug/g	a) 7.2 mg/L b) 4.4 mg/L c) 2.4 mg/L d) 1.1 mg/L e) 0.4 mg/L Exposure levels. Measurements after 2 wk. Colorado, Fort Collins, Horsetooth Reservoir AAS

DELIBERATE EXPOSURE; AQUATIC; CRAYFISHES; BODY; GILLS; HEPATOPANCREAS; MUSCLES; CARAPACE; ANTENNAL GLANDS; CADMIUM; BIOACCUMULATION; WATER POLLUTION; COLORADO

Mirenda, R.J. 1986 Archives of Environmental Contamination and Toxicology 15:401-407

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Deer, fallow
DAMA DAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7116 Liver	8	0.03-0.16 ppm Wet wt	0.08 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7117 Muscle	8	0.02-0.08 ppm Wet wt	0.05 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Deer, red
CERVUS ELAPHUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7118 Kidney	18	Not given	0.8+/-0.8 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
7119 Liver	17	Not given	0.1+/-0.08 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
NORWAY; CADMIUM; LIVER; KIDNEYS; DEER; MOOSE; REINDEER; ENVIRONMENTAL EXPOSURE; CERVIDES; TERRESTRIAL Froslie, A.; Haugen, A.; Holt, G.; Norheim, G. 1986 Bulletin of Environmental Contamination and Toxicology 37:453-460				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Deer, red
CERVUS ELAPHUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7120 Liver	8	0.09-0.28 ppm Wet wt	0.15 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7121 Muscle	8	0.06-0.13 ppm Wet wt	0.07 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Deer, roe
CAPREOLUS CAPREOLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7122 Kidney	77	Not given	2.8+/-2.8 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
7123 Liver	77	Not given	0.4+/-0.5 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
NORWAY; CADMIUM; LIVER; KIDNEYS; DEER; MOOSE; REINDEER; ENVIRONMENTAL EXPOSURE; CERVIDES; TERRESTRIAL Froslie, A.; Haugen, A.; Holt, G.; Norheim, G. 1986 Bulletin of Environmental Contamination and Toxicology 37:453-460				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Deer, white-tailed
ODOCOILEUS VIRGINIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7124 Kidney	a) 4 b) 9 c) 5	a) Not given b) Not given c) Not given	a) 93.9 ppm b) 55.9 ppm c) 15.5 ppm Dry wt	a) Collected <8 km from zinc smelter b) Collected 10-20 km from smelter c) Collected >100 km from smelter Mean levels significantly higher near smelters. Pennsylvania, Palmerton ICP-AES
7125 Liver	a) 4 b) 13 c) 5	a) Not given b) Not given c) Not given	a) 11.6 ppm b) 4.2 ppm c) 1.9 ppm Dry wt	a) Collected <8 km from zinc smelter b) Collected 10-20 km from smelter c) Collected >100 km from smelter Mean levels significantly higher near smelters. Pennsylvania, Palmerton ICP-AES

DEER; ENVIRONMENTAL EXPOSURE; ZINC; CADMIUM; LEAD; COPPER; BRAIN; TEETH; LIVER; KIDNEYS; BONES; PENNSYLVANIA; SMELTERS; TERRESTRIAL; METAL POISONING; BIOLOGICAL MONITORING

Sileo, L.; Beyer, W.N. 1985 Journal of Wildlife Diseases 21(3):289-296

Dog
CANIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7126 Bone	2	0.08-0.11 ug/g	0.10 ug/g	Pleistocene (20-50,000 yr BP) specimens. Tibia and fibula, collected from cave, late 19th century. Significance of sampling techniques, burial site conditions and other geochemical and geographic factors is discussed. Calculated mean. France AAS

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Dolphin, striped
STENELLA COERULEOALBA

Tissue	Cases Exposure Route	Range	Mean	General Information
7127 Adipose	a) 1 b) 1 c) 1	a) 0.001-0.001 ug/g b) 0.031-0.037 ug/g c) 0.029-0.034 ug/g Wet wt	a) 0.001 ug/g b) 0.034+/-0.003 ug/g c) 0.031+/-0.002 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Samples from melon, front, central and rear segments of blubber. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Mean % moisture was 37.2+/-5.15, 26.7+/-3.41, 28.1+/-5.41, repectively. Japan, Taiji, Kii Peninsula AAS
7128 Adrenal gland	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.18 ug/g c) 0.82 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7129 Amniotic fluid	1	Not applicable	0.02 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS
7130 Blood	a) 1 b) 1	a) Not applicable b) Not applicable	a) 0.05 ug/g b) 0.12 ug/g Wet wt	a) Mature male b) Pregnant female Animals, captured 12/78, weighed 145, 163 kg and ages were 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7131 Bone	3	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable j) Not applicable k) Not applicable	a) 0.003 ug/g b) 0.003 ug/g c) 0.003 ug/g d) 0.003 ug/g e) 0.14 ug/g f) 0.16 ug/g g) 0.08 ug/g h) 0.12 ug/g i) 0.25 ug/g j) 0.29 ug/g k) 0.10 ug/g Wet wt	a) Female fetus, skull b) Dorsal vertebra c) Lumbar vertebra d) Caudal vertebra e) Mature male, dosal vertebra f) Lumbar vertebra g) Caudal vertebra h) Pregnant female, skull i) Dorsal vertebra j) Lumbar vertebra k) Caudal vertebra Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, repectively. Japan, Taiji, Kii Peninsula AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7132 Cartilage	3	a) Not applicable b) Not applicable c) Not applicable	a) 0.003 ug/g b) 0.02 ug/g c) 0.02 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Intervertebral discs. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7133 Cerebellum	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.03 ug/g c) 0.08 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7134 Cerebrum	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0l.0 ug/g c) 0.08 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7135 Diaphragm	a) 1 b) 1	a) Not applicable b) Not applicable	a) <0.005 ug/g b) 0.06 ug/g Wet wt	a) Female fetus b) Mature male Animals, captured 12/78, weighed 10, 145 kg and ages were 11.6, 16.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7136 Heart	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.05 ug/g c) 0.13 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7137 Intestine	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.14 ug/g c) 0.28 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7138 Kidney	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 9.17 ug/g c) 63.7 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7139 Liver	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 2.11 ug/g c) 7.03 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7140 Lung	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.40 ug/g c) 0.40 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7141 Mammary gland	1	Not applicable	0.73 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS
7142 Medulla oblongata	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.02 ug/g c) 0.06 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7143 Muscle	a) 1 b) 1 c) 1	a) 0.005-0.005 ug/g b) 0.04-0.08 ug/g c) 0.10-0.19 ug/g Wet wt	a) 0.005 ug/g b) 0.06+/-0.01 ug/g c) 0.12+/-0.02 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Samples of dorsal and ventral sides from front, central and rear segments. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7144 Ovary	a) 1 b) 1	a) Not applicable b) Not applicable	a) <0.005 ug/g b) 0.73 ug/g Wet wt	a) Female fetus b) Preganat female Animals, captured 12/78, weighed 10 and 163 kg and ages were 11.6, 25.0 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7145 Pancreas	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.51 ug/g c) 1.69 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7146 Placenta	1	Not applicable	0.07 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS
7147 Skin	3	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0.003 ug/g b) 0.002 ug/g c) 0.25 ug/g d) 0.17 ug/g e) 0.13 ug/g f) 0.13 ug/g Wet wt	a) Female fetus, black skin b) White skin c) Mature male, black skin d) White skin e) Pregnant female, black skin f) White skin Samples from dorsal (black) and venteral (white) areas posterior to eye. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7148 Spleen	3	a) Not applicable b) Not applicable c) Not applicable	a) <0.005 ug/g b) 0.16 ug/g c) 0.54 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7149 Stomach	3	a) <0.005 ug/g b) 0.12-0.51 ug/g c) 0.36-2.10 ug/g Wet wt	a) <0.005 ug/g b) 0.35 ug/g c) 1.07 ug/kg Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Means calculated by extractor from data for 3 samples. Japan, Taiji, Kii Peninsula AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7150 Testis	1	Not applicable	0.23 ug/g Wet wt	Mature male, 12/78, wt 145 kg, age 16.5 mo. Japan, Taiji, Kii Peninsula AAS
7151 Umbilical cord	1	Not applicable	0.03 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS
7152 Uterus	a) 1 b) 1	a) Not applicable b) Not applicable	a) <0.005 ug/g b) 0.28 ug/g Wet wt	a) Female fetus b) Preganat female Animals, captured 12/78, weighed 10 and 163 kg and ages were 11.6, 25.0 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7153 Vagina	a) 1 b) 1	a) Not applicable b) Not applicable	a) <0.005 ug/g b) 0.33 ug/g Wet wt	a) Female fetus b) Preganat female Animals, captured 12/78, weighed 10 and 163 kg and ages were 11.6, 25.0 mo, respectively. Japan, Taiji, Kii Peninsula AAS

ENVIRONMENTAL EXPOSURE; DOLPHINS; AQUATIC; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; CALCIUM; METALS; WATER POLLUTION; MUSCLES; BONES; ADIPOSE TISSUE; LIVER; SKIN; STOMACH; INTESTINES; PANCREAS; ADRENAL GLANDS; HEART; SPLEEN; BLOOD; LUNGS; KIDNEYS; DIAPHRAGM; BRAIN; OVARIES; TESTES; PLACENTA; VAGINA; AMNIOTIC FLUID; UMBILICAL CORD; MAMMARY GLANDS; UTERUS; AGE; FETUS; ADULTS; JAPAN

Honda, K.; Tatsukawa, R.; Fujiyama, T. 1982 Agricultural and Biological Chemistry 46(12):3011-3021

Duck, mottled
ANAS FULVIGULA

Tissue	Cases Exposure Route	Range	Mean	General Information
7154 Bone	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.22+/-0.01 mg/kg b) 0.38+/-0.01 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference (p<0.001). Texas, Chambers County ES
7155 Feathers	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.22+/-0.03 mg/kg b) 0.60+/-0.08 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference (p<0.001). Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS

Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Duck, wood
AIX SPONSA

Tissue	Cases Exposure Route	Range	Mean	General Information
7156 Feathers	a) 18 b) 14 c) 20 d) 16 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 2.22 ppm b) 2.36 ppm c) 4.00 ppm d) 29.56 ppm Wet wt	a) 0 ppm Cd in diet b) 1 ppm c) 10 ppm d) 100 ppm One-wk-old ducks fed Cd in diet containing 18 or 30% protein for 3 mo. Mean body wt at 13 wk of age, 498.8-543.6. Detection limit 1.00 ppm wet wt. Dietary protein levels caused no significant difference in Cd residues. South Carolina, Aiken and Anderson Counties; Georgia, Athens AAS
7157 Kidney	69 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) <2.50 ppm b) <2.50 ppm c) 3.55 ppm d) 5.80 ppm e) 48.39 ppm f) 72.85 ppm g) 140.52 ppm h) 124.75 ppm Wet wt	a) 0 ppm Cd in diet, 30% protein b) 0 ppm, 18% protein c) 1 ppm, 30 % protein d) 1 ppm, 18% protein e) 10 ppm, 30% protein f) 10 ppm, 18 % protein g) 100 ppm, 30 % protein h) 100 ppm, 18% protein One-wk-old ducks fed Cd in diet containing 30 or 18% protein for 3 mo. Detection limit 2.50 ppm wet wt. Mean body wt at 13 wk of age, 498.8-543.6. South Carolina, Aiken and Anderson Counties; Georgia, Athens Tubular cell necrosis, nuclear hypertrophy, diffuse fibrosis, some epithelial calcification, hyaline casts, multiple foci of lymphoid cells (100 ppm group). More common, severe in 18% protein group. AAS
7158 Liver	a) 18 b) 14 c) 20 d) 16 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) <1.00 ppm b) 2.25 ppm c) 26.78 ppm d) 208.88 ppm Wet wt	a) 0 ppm Cd in diet b) 1 ppm c) 10 ppm d) 100 ppm One-wk-old ducks fed Cd in diet containing 18 or 30% protein for 3 mo. Mean body wt at 13 wk of age, 498.8-543.6. Detection limit 1.00 ppm wet wt. Dietary protein levels caused no significant difference in Cd residues. South Carolina, Aiken and Anderson Counties; Georgia, Athens AAS

DUCKS; DELIBERATE EXPOSURE; AQUATIC; WATERFOWL; FEATHERS; LIVER; KIDNEYS; CADMIUM; SOUTH CAROLINA; GEORGIA

Mayack, L.A.; Bush, P.B.; Fletcher, O.J.; Page, R.K.; Fendley, T.T. 1981 Archives of Environmental Contamination and Toxicology 10:637-645

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Earthworm

Tissue	Cases Exposure Route	Range	Mean	General Information
7159 Body		a) Not given b) Not given	a) 0.300 mg/g b) 1.120 mg/g Wet wt	a) Controls, field with no sewage sludge conditioning b) Treatment group from field with sewage sludge conditioning, 2-OT/ha since 1976. France, Worben

BODY; EARTHWORMS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FRANCE; POLYCHLORINATED BIPHENYLS; METALS; CADMIUM; ZINC; LEAD; COPPER; CHROMIUM; BIOACCUMULATION; SEWAGE; LAND POLLUTION

Diercxsens, P.; de Weck, D.; Borsinger, N.; Rosset, B.; Tarradellas, J. 1985 Chemosphere 14(5):511-522

Tissue	Cases Exposure Route	Range	Mean	General Information
7160 Body, whole		Not given	140 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Earthworms not observed at Palmerton, 2 km downwind. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Earthworm, red
LUMBRICUS RUBELLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7161 Body	a) 26 b) 16 c) 23	a) 9.14-17.90 ug/g b) 7.45-27.34 ug/g c) 131.31-139.88 ug/g Dry wt	a) 15.05 ug/g b) 15.67 ug/g c) 135.62 ug/g Dry wt	a) Controls b) Field treated with fertilizer c) Field treated with municipal sludge, significantly higher Ranges of means. 4 samplings between 5/26/81 and 7/16/81. Ohio AAS

BODY; EARTHWORMS; TERRESTRIAL; OHIO; ENVIRONMENTAL EXPOSURE; METALS; CADMIUM; COPPER; LEAD; ZINC; BIOACCUMULATION; SOILS; SEWAGE; LAND POLLUTION; DELIBERATE EXPOSURE

Kruse, E.A.; Barrett, G.W. 1985 Environmental Pollution (Series A) 38:235-244

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Eel
ANGUILLA ANGUILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7162 Body	18	0.004-0.050 mg/kg Wet wt	0.014 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Lake IJssel, 1977-84. Netherlands DPASV
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Tissue	Cases Exposure Route	Range	Mean	General Information
7163 Body, whole	a) 7 b) 7	a) Not given b) Not given	a) 575+/-93 ng b) 1512+/-143 ng	a) Controls b) Fed deliberately Cd-contaminated gammarids (92.5+/-47.1 ng Cd/individual, n=60) that, when collected 8/81-9/81 from the river Weser, showed background Cd levels of 0.3+/-0.2 ppm dry wt. Germany, Bremen-Farge AAS
7164 Gall bladder	a) 7 b) 7	a) Not given b) Not given	a) 0.88+/-0.42 ppm b) 5.31+/-3.42 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS
7165 Gills	a) 7 b) 7	a) Not given b) Not given	a) 0.06+/-0.02 ppm b) 0.09+/-0.02 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS
7166 Intestine	a) 7 b) 7	a) Not given b) Not given	a) 0.75+/-0.42 ppm b) 6.46+/-3.42 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 *mm Hg* at 394 C, 10 mm Hg at 486 C

Eel
ANGUILLA ANGUILLA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7167 Kidney	a) 7 b) 7	a) Not given b) Not given	a) 2.78+/-1.23 ppm b) 6.25+/-2.13 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS
7168 Liver	a) 7 b) 7	a) Not given b) Not given	a) 0.54+/-0.18 ppm b) 1.54+/-0.47 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS
7169 Muscle	a) 7 b) 7	a) Not given b) Not given	a) 0.006+/-0.004 ppm b) 0.014+/-0.004 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS
7170 Spleen	a) 7 b) 7	a) Not given b) Not given	a) 0.47+/-0.21 ppm b) 4.85+/-4.56 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS
7171 Stomach	a) 7 b) 7	a) Not given b) Not given	a) 0.14+/-0.03 ppm b) 1.55+/-1.29 ppm Dry wt	a) Controls b) Fed deliberately Cd-contaminated gammarids (22.3+/-16.9 ppm dry wt Cd) that, when collected 8/81-9/81 from the river Weser, showed Cd levels of 0.3+/-0.2 ppm dry wt Values also given as ng/organ. Germany, Bremen-Farge AAS

CADMIUM; AQUATIC; FISHES; DELIBERATE EXPOSURE; CRUSTACEANS; GILLS; LIVER; KIDNEYS; INTESTINES; STOMACH; SPLEEN; GALL BLADDER; MUSCLES; BODY; GERMANY; BIOACCUMULATION

Haesloop, U.; Schirmer, M. 1985 Chemosphere 14(10):1627-1634

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Eel, American
ANGUILLA ROSTRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7172 Muscle	2	0.003-0.003 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7173 Body, whole	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 6.0+/-2.0 ug/g b) 3.0+/-1.0 ug/g c) 11.0+/-5.0 ug/g d) 6.0+/-2.0 ug/g e) 10.0+/-2.0 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 6.0+/-6.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION

Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 Archives of Environmental Contamination and Toxicology 15:185-197

Tissue	Cases Exposure Route	Range	Mean	General Information
7174 Bone	2	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable j) Not applicable	a) 0.043 ug/g b) 0.038 ug/g c) 0.035 ug/g d) 0.033 ug/g e) 0.033 ug/g f) 0.017 ug/g g) 0.008 ug/g h) 0.006 ug/g i) 0.007 ug/g j) 0.006 ug/g Wet wt	a) Chick, sternum b) Humerus c) Cervica vertebrae d) Femur e) Tibia f) Adult, sternum g) Humerus h) Cervical vertebrae i) Femur j) Tibia Chick was 12 d old female, adult was a 2 yr old male. Both captured in 1981. Korea, Chungcheongnando, Cheonan City AAS

BIRDS; ENVIRONMENTAL EXPOSURE; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; MERCURY; MUSCLES; BONES; FEATHERS; BIOACCUMULATION; KOREA; TERRESTRIAL

Honda, K.; Min, B.Y.; Tatsukawa, R. 1985 Bulletin of Environmental Contamination and Toxicology 35:781-789

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7175 Bone	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 3.0+/-2.0 ug/g b) 3.0+/-1.0 ug/g c) 9.0+/-2.0 ug/g d) 6.0+/-2.0 ug/g e) 15.0+/-2.0 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 9.0+/-4.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7176 Brain	a) 9 b) 6 c) 4 d) 5	a) Not given b) Not given c) Not given d) Not given	a) <1.0 ug/g b) <1.0 ug/g c) <1.0 ug/g d) 3.0+/-2.0 ug/g Wet wt	a) 12-24 day old downy young b) 30-40 day old prefledglings c) 55-70 day old fledgling d) 2 yr old adult males Mean for chicks was 1.0+/-1.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 Archives of Environmental Contamination and Toxicology 15:185-197				

Tissue	Cases Exposure Route	Range	Mean	General Information
7177 Feathers	2	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0.002 ug/g b) 0.032 ug/g c) 0.034 ug/g d) 0.059 ug/g e) 0.007 ug/g f) 0.050 ug/g Wet wt	a) Chick, coverts b) Adult, remiges c) Coverts d) Abdominal e) Primaries, rachis f) Primaries, barbs Chick was 12 d old female, adult was a 2 yr old male. Both captured in 1981. Korea, Chungcheongnando, Cheonan City AAS
BIRDS; ENVIRONMENTAL EXPOSURE; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; MERCURY; MUSCLES; BONES; FEATHERS; BIOACCUMULATION; KOREA; TERRESTRIAL Honda, K.; Min, B.Y.; Tatsukawa, R. 1985 Bulletin of Environmental Contamination and Toxicology 35:781-789				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7178 Feathers	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 2.0+/-1.0 ug/g b) 7.0+/-2.0 ug/g c) 19.0+/-7.0 ug/g d) 14.0+/-4.0 ug/g e) 24.0+/-8.0 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 13.0+/-16.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7179 Kidney	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 5.7+/-3.0 ug/g b) 3.0+/-2.0 ug/g c) 25.0+/-30.0 ug/g d) 30.0+/-10.0 ug/g e) 170+/-50.0 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 15.0+/-27.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7180 Liver	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 14.0+/-8.0 ug/g b) 3.0+/-1.0 ug/g c) 17.5+/-11.0 ug/g d) 2.0+/-1.0 ug/g e) 68.0+/-13.0 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 12.0+/-13.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION

Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 Archives of Environmental Contamination and Toxicology 15:185-197

Tissue	Cases Exposure Route	Range	Mean	General Information
7181 Muscle	2	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.004 ug/g b) 0.003 ug/g c) 0.003 ug/g d) 0.006 ug/g Wet wt	a) Chick, pectoral muscle b) Femoral muscle c) Adult, pectoral muscle d) Femoral muscle Chick was 12 d old female, adult was a 2 yr old male. Both captured in 1981. Korea, Chungcheongnando, Cheonan City AAS

BIRDS; ENVIRONMENTAL EXPOSURE; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; MERCURY; MUSCLES; BONES; FEATHERS; BIOACCUMULATION; KOREA; TERRESTRIAL

Honda, K.; Min, B.Y.; Tatsukawa, R. 1985 Bulletin of Environmental Contamination and Toxicology 35:781-789

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7182 Muscle	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 4.0+/-1.0 ug/g b) 3.0+/-1.0 ug/g c) 7.0+/-2.0 ug/g d) 4.0+/-2.0 ug/g e) 5.0+/-1.0 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 4.0+/-1.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7183 Skin	a) 9 b) 6 c) 4 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 5.0+/-2.0 ug/g b) 9.0+/-8.0 ug/g c) 13.0+/-3.0 ug/g d) 12.0+/-9.0 ug/g Wet wt	a) 12-24 day old downy young b) 30-40 day old prefledglings c) 55-70 day old fledgling d) 2 yr old adult males Mean for chicks was 7.0+/-5.0 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 Archives of Environmental Contamination and Toxicology 15:185-197				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
7184 Body, whole	1830-3050	a) 0.01-0.41 ug/g b) 0.01-0.35 ug/g Wet wt	a) 0.04 ug/g b) 0.03 ug/g Geometric mean Wet wt	a) 1978-79 b) 1980-81 Extensive data given for 60 freshwater species at 112 sites. Composite samples of 3-5 fish. Part of National Contaminant Biomonitoring Program. United States AAS
BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED STATES; COMPARATIVE EVALUATIONS; LEAD; MERCURY; CADMIUM; ARSENIC; SELENIUM; COPPER; ZINC; BIOLOGICAL MONITORING; METALS; WATER POLLUTION Lowe, T.P.; May, T.W.; Brumbaugh, W.G.; Kane, D.A. 1985 Archives of Environmental Contamination and Toxicology 14:363-388				

Tissue	Cases Exposure Route	Range	Mean	General Information
7185 Muscle				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
7186 Muscle	a) 127 b) 80	a) Not detected-0.87 ug/g b) Not detected-0.83 ug/g	a) 0.29 ug/g b) 0.18 ug/g	a) Collected 1978 b) Collected 1979 Detection limit 0.01 ug/g. Means calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102				

Fish (N. chitala)
NOTOPTERUS CHITALA

Tissue	Cases Exposure Route	Range	Mean	General Information
7187 Body	5	0.07-0.34 ug/g	0.20 ug/g	Collected 8/83 from polluted lake. Levels of 4.6 ug/L and 4.31 mg/kg (means) in water and sediment, respectively. Mean calculated by extractor. India, Hyderabad, Lake Husainsagar AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; ZOOPLANKTON; CADMIUM; COPPER; BODY; WATER POLLUTION; INDIA; BIOMAGNIFICATION Prahalad, A.K.; Seenayya, G. 1986 Archives of Environmental Contamination and Toxicology 15:417-425				

Fly, flesh
SARCOPHAGIDAE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7188 Body		Not given	44 mg/kg Dry wt	Collected June-Oct 79 at Palmerton, 2 km downwind of smelters. Levels highest of those in all organisms studied. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Frog, wood
RANA SYLVATICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7189 Body, whole	4	1.1-2.3 mg/kg Dry wt	1.6 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Gadwall
ANAS STREPERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7190 Bone	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 0.27+/-0.08 mg/kg b) 0.44+/-0.04 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.01$). Texas, Chambers County ES
7191 Feathers	a) 61 b) 2 Ingestion	a) Not given b) Not given	a) 0.06+/-0.01 mg/kg b) 0.12+/-0.02 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Gar, spotted
LEPISOSTEUS OCULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7192 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.20 ug/g b) 0.20 ug/g c) 0.20 ug/g d) 0.20 ug/g e) 0.20 ug/g f) 0.20 ug/g g) 0.30 ug/g h) 0.20 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Little Pigeon Bayou d) Grand Lake e) Henderson Lake f) Bayou Petite Prairie g) Spring Bayou h) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin ES
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7193 Kidney	Ingestion			Review. Increase in level as silage-borne Cd increased. No effect on milk production, or accumulation in milk or blood.
7194 Liver	Ingestion			Review. Increase in level as silage-borne Cd increased. No effect on milk production, or accumulation in milk or blood.
KIDNEYS; LIVER; TERRESTRIAL; GOATS; DELIBERATE EXPOSURE; REVIEW; CADMIUM; INDUSTRIAL CHEMICALS; ANIMAL FEEDS; BIOACCUMULATION; SEWAGE Komsta-Szumska, E. 1986 Veterinary and Human Toxicology 28(1):31-37				

Godwit, bar-tailed
LIMOSA LAPPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7195 Feathers	a) 1 b) 13	a) Not applicable b) Not applicable	a) 0.07 mg/kg b) 0.26+/-0.16 mg/kg	a) Shaft b) Vane Shaft levels below limit of detection, 0.01+/-0 mg/kg, in 25 of 26 samples. Vane levels below limit of detection, 0.03+/-0.00 mg/kg, in 6 of 19 samples. Dutch Wadden Sea AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Godwit, bar-tailed
LIMOSA LAPPONICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7196 Kidney	9	Not given	5.57+/-2.75 mg/kg	Collected from Schiermonnikoog. Dutch Wadden Sea AAS
FEATHERS; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; METALS; CADMIUM; LEAD; BIOACCUMULATION; WATER POLLUTION				
Goede, A.A.; de Voogt, P. 1985 Environmental Pollution (Series A) 37:311-322				

Grackle, common
QUISCALUS QUISCULA

Tissue	Cases Exposure Route	Range	Mean	General Information
7197 Body	a) 1 b) 1	a) Not applicable b) Not applicable	a) 0.91 mg/kg b) 1.0 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS				
Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Grasshopper
CHORTHIPPUS BRUNNEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7198 Body	a) 16 b) 16 c) 16 d) 16 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.041+/-0.01 mg/kg b) 0.045+/-0.01 mg/kg c) 0.044+/-0.01 mg/kg d) 19.2+/-1.7 mg/kg S.E. Fresh wt	a) Control diet b) Supplemented with Zn c) Supplemented with Cu d) Supplemented with Cd Feed was ryegrass with normal levels of Zn, Cu, Cd (60, 20, 0.7 mg/kg, respectively). Supplements were 40 mg/kg of diet. Feeding trial over 21 days with daily renewal of food supply. Included data based on sex. England AAS
DELIBERATE EXPOSURE; GRASSHOPPERS; INSECTS; BODY; CADMIUM; COPPER; ZINC; TERRESTRIAL; METALS; BIOCONCENTRATION				
Johnson, M.S. 1986 Bulletin of Environmental Contamination and Toxicology 37:234-238				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Grebe, black-necked
PODICEPS NIGRICOLLIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7199 Adipose	a) 6 b) 8 c) 6 d) 8 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) <0.2 ug/g b) <0.2 ug/g c) <0.2 ug/g d) <0.2 ug/g e) <0.2 ug/g Dry wt	a) Collected 4/83 b) 9/83 c) 4/84 d) 10/84 e) 4/85 Collected by shooting. Long-term monitoring, birds wintering in moderately polluted environment. Italy, Marano AAS
7200 Brain	a) 6 b) 8 c) 6 d) 8 e) 5	a) Not given b) Not given c) <0.02-0.10 ug/g d) <0.02-0.31 ug/g e) <0.02-0.10 ug/g	a) <0.02 b) <0.02 c) Not given d) Not given e) Not given Dry wt	a) Collected 4/83 b) 9/83 c) 4/84 d) 10/84 e) 4/85 Collected by shooting. Long-term monitoring, birds wintering in moderately polluted environment. Italy, Marano AAS
7201 Kidney	a) 6 b) 8 c) 6 d) 8 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.61+/-0.22 ug/g b) 0.94+/-0.86 ug/g c) 0.79+/-0.62 ug/g d) 3.12+/-2.57 ug/g e) 0.73+/-0.05 ug/g Dry wt	a) Collected 4/83 b) 9/83 c) 4/84 d) 10/84 e) 4/85 Collected by shooting. Long-term monitoring, birds wintering in moderately polluted environment. Italy, Marano AAS
7202 Liver	a) 6 b) 8 c) 6 d) 8 e) 5	a) Not given b) <0.02-0.41 ug/g c) <0.02-0.53 ug/g d) Not given e) Not given Dry wt	a) 0.09+/-0.06 ug/g b) Not given c) Not given d) 0.45+/-0.36 ug/g e) 0.33+/-0.29 ug/g Dry wt	a) Collected 4/83 b) 9/83 c) 4/84 d) 10/84 e) 4/85 Collected by shooting. Long-term monitoring, birds wintering in moderately polluted environment. Italy, Marano AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Grebe, black-necked
PODICEPS NIGRICOLLIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7203 Muscle	a) 6 b) 8 c) 6 d) 8 e) 5	a) <0.02-0.15 ug/g b) Not given c) <0.02-0.08 ug/g d) <0.02-0.20 ug/g e) <0.02-0.09 ug/g Dry wt	a) Not given b) <0.02 ug/g c) Not given d) Not given e) Not given Dry wt	a) Collected 4/83 b) 9/83 c) 4/84 d) 10/84 e) 4/85 Collected by shooting. Long-term monitoring, birds wintering in moderately polluted environment. Italy, Marano AAS
7204 Uropygial gland	a) 6 b) 8 c) 6 d) 8 e) 5	a) Not given b) Not given c) <0.02-0.17 d) Not given e) Not given Dry wt	a) <0.02 ug/g b) <0.02 ug/g c) Not given d) <0.02 ug/g e) <0.02 ug/g Dry wt	a) Collected 4/83 b) 9/83 c) 4/84 d) 10/84 e) 4/85 Collected by shooting. Long-term monitoring, birds wintering in moderately polluted environment. Italy, Marano AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; ITALY; ADIPOSE TISSUE; UROPYGIAL GLAND; BRAIN; MUSCLES; KIDNEYS; LIVER; MERCURY; SELENIUM; CADMIUM; LEAD; BIRDS; TRACE ELEMENTS; WATER POLLUTION Leonzio, C.; Fossi, C.; Focardi, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:219-225				

Grosbeak, rose-breasted
PHEUCTICUS LUDOVICIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7205 Body	2	0.60-1.2 mg/kg Dry wt	0.9 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Gull, laughing
LARUS ATRICILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7206 Bone				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
7207 Brain				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
7208 Heart				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
7209 Kidney				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
7210 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
7211 Muscle				Review. Cd, Pb, Hg and Se [illegible] creased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Hare, brown
LEPUS CAPENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7212 Liver	5	0.11-0.17 ppm Wet wt	0.13 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7213 Muscle	5	0.06-0.10 ppm Wet wt	0.08 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Hedgehog
ERINACEUS EUROPAEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7214 Liver	5	0.28-1.49 ppm Wet wt	0.54 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7215 Muscle	5	0.06-0.35 ppm Wet wt	0.16 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Heron, green-backed
BUTORIDES STRIATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7216 Kidney	a) 18 b) 15 c) 20 d) 18 e) 19 f) 19	a) Not detected-1.10 ppm b) 0.13-5.70 ppm c) 0.13-4.30 ppm d) Not detected-1.90 ppm e) Not detected-1.20 ppm f) Not detected-1.10 ppm Wet wt	a) 0.35 ppm b) 0.98 ppm c) 1.13 ppm d) 0.65 ppm e) 0.35 ppm f) 0.50 ppm Wet wt Geometric mean	a) Irondale, Big River b) Deslodge c) Brown's Ford d) Upper River, Black River e) Clearwater Lake f) Lower River Collection sites. Big River polluted by Pb tailings from mining begun in 1700's and continued through 1972. Black River drains currently mined area. Limit of detection 0.1 ppm. Missouri, Big River, Black River ICP-AES

Niethammer, K.R.; Atkinson, R.D.; Baskett, T.S.; Samson, F.B. 1985

Herring
CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7217 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH

Sherlock, J.C. 1984 Experientia 40(2):152-156

Herring, Baltic
CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7218 Body	14	0.003-0.014 mg/kg Wet wt	0.006 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-84. Netherlands DPASV

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Hornet

Tissue	Cases Exposure Route	Range	Mean	General Information
7219 Body		Not given	2.3 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7220 Adrenal gland	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 1.45+/-0.6 ug/g b) 0.9+/-0.2 ug/g c) 0 Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS
HORSES; LEAD; CADMIUM; LIVER; KIDNEYS; RIBS; HAIR; HEART; BONES; MUSCLES; LUNGS, SPLEEN; BRAIN; ADRENAL GLANDS; THYROID GLANDS Burrows, G.E.; Borchard, R.E. 1982 American Journal of Veterinary Research 43(12):2129-2133				

Tissue	Cases Exposure Route	Range	Mean	General Information
7221 Bone	3	0.11-1.50 ug/g	Not given	Pleistocene (20-50,000 yr BP) specimens. Femur and two humeri, collected from caves, late 19th century. Significance of sampling techniques, burial site conditions and other geochemical and geographic factors is discussed. France AAS
BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7222 Bone	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 1.45+/-0.15 ug/g b) 2+/-1.2 ug/g c) 1.5+/-0.1 ug/g Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Measured in ribs. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS
HORSES; LEAD; CADMIUM; LIVER; KIDNEYS; RIBS; HAIR; HEART; BONES; MUSCLES; LUNGS; SPLEEN; BRAIN; ADRENAL GLANDS; THYROID GLANDS Burrows, G.E.; Borchard, R.E. 1982 American Journal of Veterinary Research 43(12):2129-2133				

Tissue	Cases Exposure Route	Range	Mean	General Information
7223 Bone				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.
REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343				

Tissue	Cases Exposure Route	Range	Mean	General Information
7224 Brain	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 0.6+/-0.5 ug/g b) 0 c) 0 Wet wt	a) Fed contaminated hay mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS
HORSES; LEAD; CADMIUM; LIVER; KIDNEYS; RIBS; HAIR; HEART; BONES; MUSCLES; LUNGS; SPLEEN; BRAIN; ADRENAL GLANDS; THYROID GLANDS Burrows, G.E.; Borchard, R.E. 1982 American Journal of Veterinary Research 43(12):2129-2133				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7225 Hair				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.

REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM

Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343

Tissue	Cases Exposure Route	Range	Mean	General Information
7226 Kidney	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 63.3+/-14 ug/g b) 33.7+/-11.2 ug/g c) 5.6+/-2.2 ug/g Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS

HORSES; LEAD; CADMIUM; LIVER; KIDNEYS; RIBS; HAIR; HEART; BONES; MUSCLES; LUNGS; SPLEEN; BRAIN; ADRENAL GLANDS; THYROID GLANDS

Burrows, G.E.; Borchard, R.E. 1982 American Journal of Veterinary Research 43(12):2129-2133

Tissue	Cases Exposure Route	Range	Mean	General Information
7227 Kidney				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.

REVIEW; ENVIRONMENTAL EXPOSURE, LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM

Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7225 Hair				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.

REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM

Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343

Tissue	Cases Exposure Route	Range	Mean	General Information
7226 Kidney	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 63.3+/-14 ug/g b) 33.7+/-11.2 ug/g c) 5.6+/-2.2 ug/g Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS

HORSES; LEAD; CADMIUM; LIVER; KIDNEYS; RIBS; HAIR; HEART; BONES; MUSCLES; LUNGS; SPLEEN; BRAIN; ADRENAL GLANDS; THYROID GLANDS

Burrows, G.E.; Borchard, R.E. 1982 American Journal of Veterinary Research 43(12):2129-2133

Tissue	Cases Exposure Route	Range	Mean	General Information
7227 Kidney				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.

REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM

Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7228 Liver	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 14.3+/-2.4 ug/g b) 11.4+/-5 ug/g c) 1.3+/-.5 ug/g Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS
HORSES; LEAD; CADMIUM; LIVER; KIDNEYS; RIBS; HAIR; HEART; BONES; MUSCLES; LUNGS; SPLEEN; BRAIN; ADRENAL GLANDS; THYROID GLANDS Burrows, G.E.; Borchard, R.E. 1982 American Journal of Veterinary Research 43(12):2129-2133				

Tissue	Cases Exposure Route	Range	Mean	General Information
7229 Liver				Review, with specific data from studies on equine and bovine tissue (Montana, Missouri, respectively), of Pb mining/smelters in the US and resulting toxicosis. Historical aspects and importance of domestic animals as indicators of contamination noted.
REVIEW; ENVIRONMENTAL EXPOSURE; LEAD; TERRESTRIAL; CATTLE; HORSES; MINING; SMELTERS; OCCUPATIONAL HAZARDS; KIDNEYS; LIVER; BONES; HAIR; BLOOD; MONTANA; MISSOURI; UNITED STATES; ZINC; CADMIUM Burrows, G.E. 1981 Veterinary and Human Toxicology 23(5):337-343				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7230 Lung	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 0.47+/-0.17 ug/g b) 0.73+/-0.2 ug/g c) 0 Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS
7231 Muscle	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 0.45+/-0.2 ug/g b) 0.63+/-0.6 ug/g c) 0 Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS
7232 Spleen	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 1.13+/-0.4 ug/g b) 1.0+/-0.1 ug/g c) 0 Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Horse
EQUUS CABALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7233 Thyroid gland	a) 4 b) 4 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 1.0 ug/g b) 0 c) 0 Wet wt	a) Fed contaminated hay (mean Pb 423 mg/kg hay, Cd 10.8 mg/kg, dose 7.2-7.6 mg Pb/kg body wt/d) grown near lead/zinc smelter and silver mine b) Fed control hay (no recognized source of heavy metal contamination) and given lead acetate trihydrate (dose 9.86-10.25 mg Pb/kg/d) c) Fed control hay Detection limits not given. Idaho, Coeur d'Alene River Basin Incoordination, paresis of lips and rectal sphincter, weight loss, CNS depression, anorexia, and regurgitation of ingesta through external nares with associated aspiration pneumonia. Death at 84-100 d (a) or 113-304 d (b) AAS
HORSES; LEAD; CADMIUM; LIVER; KIDNEYS; RIBS; HAIR; HEART; BONES; MUSCLES; LUNGS; SPLEEN; BRAIN; ADRENAL GLANDS; THYROID GLANDS Burrows, G.E.; Borchard, R.E. 1982 American Journal of Veterinary Research 43(12):2129-2133				

Insect
SIALIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7234 Body		a) Not given b) Not given c) Not given	a) 4.1 ug/g b) 1.6 ug/g c) 0.1 ug/g Dry wt	a) Contaminated, Lake Gruvsjon b) Contaminated, Lake Batviksgolen c) Control, Lake Hammarsjon Neuropteran larvae, 6-14 animals pooled. Sweden, Bersbo area AAS
CADMIUM; ZINC; COPPER; CRAYFISH; HEPATOPANCREAS; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MINING; SWEDEN; AQUATIC; INSECTS; LARVAE Lundholm, C.E.; Andersson, L. 1985 Ambio 14(3):167-172				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Insect
SIALIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7235 Liver	a) 5 b) 7	a) Not detected-0.65 ppm b) 0.06-0.22 ppm Dry wt	a) 0.189 ppm b) 0.117 ppm Dry wt Geometric	a) Detected in 4/5 composite samples of aquatic insects collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 7/7 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. Detection limit 0.04 ppm dry wt. California, San Joaquin Valley AAS

BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC

Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63

Knot
CALIDRIS CANUTUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7236 Feathers	a) 2 b) 4	a) Not given b) Not given	a) 0.12+/-0.01 mg/kg b) 0.28+/-0.13 mg/kg	a) Shaft b) Vane Detected in juveniles only. Shaft levels below limit of detection, 0.04+/-0.01 mg/kg, in 29 of 31 samples. Vane levels below limit of detection, 0.11+/-0.04 mg/kg, in 33 of 37 samples. Dutch Wadden Sea AAS

FEATHERS; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; METALS; CADMIUM; LEAD; BIOACCUMULATION; WATER POLLUTION

Goede, A.A.; de Voogt, P. 1985 Environmental Pollution (Series A) 37:311-322

Lion
PANTHERA LEO

Tissue	Cases Exposure Route	Range	Mean	General Information
7237 Bone	1	Not applicable	1.00 ug/g	Pleistocene (20,000-50,000 yr BP) metacarpal. Collected from cave, late 19th century. Significance of sampling techniques, burial site conditions and other geochemical and geographic factors is discussed. France AAS

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Lobster

Tissue	Cases Exposure Route	Range	Mean	General Information
7238 Liver				Review dealing with quality of data on trace metals in marine samples.

ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS

Topping, G. 1986 Science of the Total Environment 49:9-25

Lynx, pardel
LYNX PARDINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7239 Liver	5	0.17-0.27 ppm Wet wt	0.22 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7240 Muscle	5	0.06-0.14 ppm Wet wt	0.09 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Millipede
POLYDESMIDA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7241 Body		Not given	4.5 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Millipedes (unidentified)

Tissue	Cases Exposure Route	Range	Mean	General Information
7242 Body		Not given	2.1 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Mink
MUSTELA VISON

Tissue	Cases Exposure Route	Range	Mean	General Information
7243 Kidney	a) 108 b) 178	a) 0.12-15.99 ug/g b) 0.11-11.66 ug/g Dry wt	a) 1.21+/-0.20 ug/g b) 1.02+/-0.10 ug/g S.E. Dry wt	a) 1981-1982 b) 1982-1983 Trapping season. Collected in southwest, central, north, and east Virginia. Limit of detection 0.1 ug/g dry wt. Virginia AAS
7244 Liver	a) 125 b) 199	a) 0.00-3.48 ug/g b) 0.00-2.43 ug/g Dry wt	a) 0.38+/-0.05 ug/g b) 0.33+/-0.02 ug/g S.E. Dry wt	a) 1981-1982 b) 1982-1983 Trapping season. Collected in southwest, central, north, and east Virginia. Limit of detection 0.1 ug/g dry wt. Virginia AAS

BONES; KIDNEYS; LIVER; MINKS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; VIRGINIA; METAL POISONING; LEAD POISONING; METALS; LEAD; CADMIUM; COPPER; ZINC; BIOACCUMULATION

Ogle, M.C.; Scanlon, P.F.; Kirkpatrick, R.L.; Gwynn, J.V. 1985 Bulletin of Environmental Contamination and Toxicology 35:29-37

Monkfish
LOPHIUS AMERICANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7245 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH

Sherlock, J.C. 1984 Experientia 40(2):152-156

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Moose
ALCES ALCES

Tissue	Cases Exposure Route	Range	Mean	General Information
7246 Kidney	796	Not given	2.9+/-2.6 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
7247 Liver	775	Not given	0.6+/-0.5 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
NORWAY; CADMIUM; LIVER; KIDNEYS; DEER; MOOSE; REINDEER; ENVIRONMENTAL EXPOSURE; CERVIDES; TERRESTRIAL Froslie, A.; Haugen, A.; Holt, G.; Norheim, G. 1986 Bulletin of Environmental Contamination and Toxicology 37:453-460				

Mosquitofish
GAMBUSIA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7248 Body	a) 2 b) 4	a) Not detected b) Not detected-0.09 ppm Dry wt	a) Not detected b) 0.041 ppm Dry wt Geometric	a) Detected in 0/2 composite samples collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 2/4 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. Detection limit was 0.4 ppm dry wt. California, San Joaquin Valley AAS
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Moth
PAONIAS EXCAECATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7249 Body		Not given	8.3 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Moth (L. unipunctata)
LEUCANIA UNIPUNCTATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7250 Body		a) Not given b) Not given	a) 0.38 mg/kg b) 1.2 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Moth, eastern tent caterpillar
MALACOSOMA AMERICANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7251 Body		Not given	0.70 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Moth, gypsy
PORTHETRIA DISPAR

Tissue	Cases Exposure Route	Range	Mean	General Information
7252 Body		a) Not given b) Not given	a) 0.77 mg/kg b) 3.3 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Caterpillar, collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Moth, noctuid
NOCTUA NIGRUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7253 Body		a) Not given b) Not given	a) 1.7 mg/kg b) 4.7 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Moth, pale tiger
HALYSIDOTA TESSELLARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7254 Body		Not given	11 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Moth, tiger

Tissue	Cases Exposure Route	Range	Mean	General Information
7255 Body		Not given	4.6 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Genera were *HALYSIDOTA* and *SPILOSOMA sp.* Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Mouse, white-footed
PEROMYSCUS LEUCOPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7256 Body	a) 9 b) 9	a) Not given b) Not given	a) 1.2+/-0.1 mg/kg b) 2.6+/-0.6 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Mouse, wood
APODEMUS SYLVATICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7257 Liver	6	0.21-0.33 ppm Wet wt	0.28 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7258 Muscle	6	0.10-0.85 ppm Wet wt	0.29 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzales, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Muskrat
ONDATRA ZIBETHICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7259 Kidney	a) 10 b) 5 c) 1 d) 2 e) 6 f) 4	a) Not detected-0.65 ppm b) 0.13-5.30 ppm c) Not applicable d) 0.10-1.30 ppm e) Not detected-0.29 ppm f) 0.14-0.24 ppm Wet wt	a) 0.18 ppm b) 2.19 ppm c) 1.70 ppm d) 0.59 ppm e) 0.14 ppm f) 0.19 ppm Wet wt Geometric mean	a) Irondale, Big River b) Deslodge c) Brown's Ford d) Upper River, Black River e) Clearwater Lake f) Lower River Collection sites. Big River polluted by Pb tailings from mining begun in 1700's and continued through 1972. Black River drains currently mined area. Limit of detection 0.1 ppm. Missouri, Big River, Black River ICP-AES
Niethammer, K.R.; Atkinson, R.D.; Baskett, T.S.; Samson, F.B. 1985				

Mussel

Tissue	Cases Exposure Route	Range	Mean	General Information
7260 Body				
ENVIRONMENTAL EXPOSURE; AQUATIC; POLYCYCLIC AROMATIC HYDROCARBONS; MOLLUSKS; BIOLOGICAL MONITORING; WATER POLLUTION; JAPAN; MEASUREMENT METHODS Takatsuki, K.; Suzuki, S.; Sato, N.; Ushizawa, I. 1985 Journal of the Association of Official Analytical Chemists 68(5):945-949				

Tissue	Cases Exposure Route	Range	Mean	General Information
7261 Body	a) 405 b) 630 c) 495 d) 150	a) 7.2+/-0.9-19.5+/-1.1 ug/g b) 7.4+/-0.8-20.0+/-3.4 ug/g c) 7.1+/-0.3-11.8+/-1.5 ug/g d) 8.0+/-0.8-11.0+/-0.4 ug/g Dry wt	a) Not given b) Not given c) Not given d) Not given	a) Transplanted to bay in 1980 b) Transplanted in 1981 c) Transplanted in 1982 d) From intertidal collection site, not transplanted, range over 1980-2 45-65 mm animals transplanted to 16 sites for 4-5.5 mo. Gonads removed before levels measured. California, San Francisco Bay
ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; MUSSELS; BODY; AQUATIC; WATER POLLUTION; METALS; SILVER; ALUMINUM; CADMIUM; CHROMIUM; COPPER; MERCURY; MANGANESE; LEAD; ZINC; CALIFORNIA Smith, D.R.; Stephenson, M.D.; Flegal, A.R. 1986 Environmental Toxicology and Chemistry 5:129-138				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7262 Body		a) 0.8-2.8 ug/g b) 4.2-11.9 ug/g Dry wt	a) 1.7 ug/g b) 7.4 ug/g Dry wt	a) Gonadal tissue, range: values at 7/8/81 and 10/9/80 b) Somatic tissue, range: values at 7/8/81 and 11/18/80 All values calculated by extractor from total burdens and wt given in table. Total of 11 collections at uncontaminated site 9/80-9/81. Levels varied with season and reproductive state. Gametogenesis and spawning in 4 and 7/81. Oregon, Newport, Yaquina Bay AAS

ENVIRONMENTAL EXPOSURE; MUSSELS; MOLLUSKS; AQUATIC; BODY; GONADS; MANGANESE; NICKEL; COPPER; ZINC; CADMIUM; ARSENIC; WATER POLLUTION; METALS; OREGON

La Touche, Y.D.; Mix, M.C. 1982 Bulletin of Environmental Contamination and Toxicology 29:665-670

Tissue	Cases Exposure Route	Range	Mean	General Information
7263 Body		a) 2.1-21.4 mg/kg b) 0.50-15.9 mg/kg c) 1.8-53.2 mg/kg d) 0.60-88.9 mg/kg e) 3.2-52.4 mg/kg f) 0.64-28.4 mg/kg g) 1.2-42.2 mg/kg h) 0.52-18.6 mg/kg i) 0.88-28.0 mg/kg i) 0.88-28.0 mg/kg j) 0.65-29.7 mg/kg Dry wt	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 1979, April b) October c) 1980, April d) October e) 1981, April f) October g) 1982, April h) October i) 1983, April j) October Extremes from sampling locations distributed over the Waddenzee, coastal North Sea and Ems' estuaries, Western and Eastern Scheldt. Range of medians was 0.88-29.7 mg/kg. Netherlands ASV

ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; MUSSELS; MERCURY; LEAD; CADMIUM; COPPER; ZINC; BODY; METALS; WATER POLLUTION; NETHERLANDS

Luten, J.B.; Bouquet, W.; Burggraaf, M.M.; Rauchbaar, A.B.; Rus, J. 1986 Bulletin of Environmental Contamination and Toxicology 36:770-777

Tissue	Cases Exposure Route	Range	Mean	General Information
7264 Body	21	0.080-0.46 mg/kg Wet wt	0.21 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Eastern Scheldt, 1977-84. Netherlands DPASV

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7265 Body, whole	a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10 j) 10 10	0.41+/-0.08-5.1+/-2.15 ppm Wet wt Range of means	a) 0.41+/-0.08 ppm b) 0.57+/-0.17 ppm c) 0.7+/-0.23 ppm d) 1.2+/-0.30 ppm e) 0.93+/-0.24 ppm f) 1.3+/-0.31 ppm g) 5.1+/-2.15 ppm h) 0.75+/-0.21 ppm i) 0.46+/-0.14 ppm Wet wt	a) Connecticut River b) Hammonasset c) New Haven Harbor d) Milford Harbor e) Housatonic River f) Stratford Point g) Bridgeport h) Norwalk Harbor i) Cos Cob Harbor Collected 9/83. Levels relatively low except for Bridgeport samples. No USFDA limit for levels in seafood for humans. Connecticut AAS
BODY; MUSSELS; AQUATIC; ENVIRONMENTAL EXPOSURE; CONNECTICUT; CADMIUM; COPPER; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION Greig, R.A.; Sennefelder, G. 1985 Bulletin of Environmental Contamination and *Toxicology* 35:331-334				

Oriole, orchard
ICTERUS SPURIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7266 Body	1	Not applicable	0.62 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Otter
LUTRA LUTRA

Tissue	Cases Exposure Route	Range	Mean	General Information
7267 Liver	5	0.13-0.28 ppm Wet wt	0.19 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7268 Muscle	5	0.10-0.17 ppm Wet wt	0.13 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Ovenbird
SEIURUS AUROCAPILLIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7269 Body	2	0.64-1.1 mg/kg Dry wt	0.87 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Oyster

Tissue	Cases Exposure Route	Range	Mean	General Information
7270 Body				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7271 Body		a) 0.44+/-0.05-0.55+/-0.03 mg/kg b) 0.52+/-0.02-0.59+/-0.15 mg/kg c) 0.37+/-0.32-0.61+/-0.05 mg/kg d) 0.58+/-0.07-0.79+/-0.21 mg/kg e) 0.43+/-0.03-0.60+/-0.24 mg/kg f) 0.49+/-0.10-0.72-0.13 mg/kg	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Palmetto Bay Marina, spring, 10 stations b) Summer c) Outdoor Resorts Marina, spring, 8 stations d) Summer e) Fripp Island Marina, spring, 9 stations f) Summer Collected from mid-intertidal portion of reefs. 15 animals/sample. Sampled weekly 3/29-4/4 and 7/26-8/11/83. Detection limit 0.2 mg/kg. South Carolina AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; OYSTERS; MOLLUSKS; BODY; CADMIUM; CHROMIUM; COPPER; LEAD; NICKEL; ZINC; METALS; WATER POLLUTION; SOUTH CAROLINA
Marcus, J.M.; Thompson, A.M. 1986 Bulletin of Environmental Contamination and Toxicology 36:587-594

Tissue	Cases Exposure Route	Range	Mean	General Information
7272 Body		Not given	9.11+/-1.4 ppm Dry wt	Samples collected from entrance of the Inner Harbor Navigation Canal at Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS

MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS
Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158

Oyster, cape
CRASSOSTREA MARGARITACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7273 Body	426 (approx)	0.1+/-<0.1-2.8+/-2.0 ug/g Wet wt	Not applicable	Range of means. From survey of metal levels in oysters collected 7/77-8/79 at 25 sites along 500 km of relatively undeveloped coastline from near Mossel Bay to the Port Alfred area. Study provided data for the national marine pollution monitoring program. South Africa, southern coast AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; OYSTERS; BODY; ZINC; CADMIUM; COPPER; LEAD; IRON; MANGANESE; NICKEL; COBALT; CHROMIUM; SOUTH AFRICA; WATER POLLUTION; METALS
Watling, H.R.; Watling, R.J. 1982 Bulletin of Environmental Contamination and Toxicology 28:460-466

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Oyster, Pacific
CRASSOSTREA GIGAS

Tissue	Cases Exposure Route	Range	Mean	General Information
7274 Body	a) 328 b) 226	a) 0.42+/-1.12 ug/g b) 0.6-5.4 ug/g Wet wt	a) 0.77 ug/g b) 2.79 ug/g Wet wt	a) Collected live from 8 sites in bay b) Collected from 10 stalls in Lau Fau Shan Market Ranges of means from table means given here calculated by extractor. China, Hong Kong, New Territories (NW), Deep Bay AAS
ENVIRONMENTAL EXPOSURE; BODY; OYSTERS; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; ZINC; METALS; WATER POLLUTION; CHINA; MOLLUSKS Phillips, D.J.H.; Ho, C.T.; Ng, L.H. 1982 Archives of Environmental Contamination and Toxicology 11:533-537				

Pelican, brown
PELECANUS OCCIDENTALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7275 Bone	a) 1 b) 2	a) Not applicable b) 0.13-0.18 ppm Dry wt	a) 0.20 ppm b) 0.16+/-0.025 ppm Dry wt	a) Humerus b) Ribs Specimens collected on 11/30 and 12/1/80 in vicinity of Bahia de los Angeles, Gulf of California. Detection limit=0.1 ppm wet wt. California AAS
7276 Feathers	10	0.15-0.35 ppm Dry wt	Not given	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.1 ppm wet wt. California AAS
7277 Gonads	9	Not given	4.09+/-1.23 ppm Dry wt	Specimens collected on 11/30 and 12/1/80 in vicinity of Bahia de los Angeles, Gulf of California. Detection limit=0.1 ppm wet wt. California AAS
7278 Kidney	10	Not given	18.2+/-6.80 ppm Dry wt	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.1 ppm wet wt. California AAS
7279 Liver	10	Not given	5.80+/-3.14 ppm Dry wt	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.1 ppm wet wt. California AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Pelican, brown
PELECANUS OCCIDENTALIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7280 Pancreas	8	Not given	2.63+/-1.62 ppm Dry wt	Specimens collected on 11/30 and 12/1/80 in vicinity of Bahia de los Angeles, Gulf of California. Detection limit=0.1 ppm wet wt. California AAS

ADIPOSE TISSUE; MUSCLES; BODY; LIVER; KIDNEYS; FEATHERS; BONES; PANCREAS; GONADS; PELICANS; AQUATIC; ENVIRONMENTAL EXPOSURE; CALIFORNIA; METAL POISONING; ARSENIC; CADMIUM; CHROMIUM; COPPER; MERCURY; LEAD; SELENIUM; ZINC; DDE; BIOACCUMULATION

Ohlendorf, H.M.; Anderson, D.; Boellstorff, D.E.; Mulhern, B.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:183-192

Pike-perch
STIZOSTEDION LUCIOPERCA

Tissue	Cases Exposure Route	Range	Mean	General Information
7281 Body	a) 19 b) 3	a) <0.001-0.020 mg/kg b) 0.001-0.002 mg/kg Wet wt	a) 0.004 mg/kg b) 0.002 mg/kg Wet wt	a) Collected from Lake IJssel, 1977-84 b) Collected from Hollands Diep, 1982-84 Edible parts, mixed samples weighing about 20 kg. Netherlands DPASV

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Pintail
ANAS ACUTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7282 Bone	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 0.52 mg/kg b) 0.25+/-0.04 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.05$). Texas, Chambers County ES
7283 Feathers	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 0.17+/-0.01 mg/kg b) 0.09+/-0.02 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.05$). Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS

Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Plaice
PLEURONECTES PLATESSA

Tissue	Cases Exposure Route	Range	Mean	General Information
7284 Body	13	0.001-0.007 mg/kg Wet wt	0.003 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-83. Netherlands DPASV

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Tissue	Cases Exposure Route	Range	Mean	General Information
7285 Body, whole				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7286 Eggs	10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.006 ppm b) 0.005 ppm c) 0.010 ppm d) 0.007 ppm e) 0.016 ppm Dry wt	a) Females, basal diet, composite sample b) 25% control sunflower meal c) 25% sludge-grown sunflower meal d) 50% control sunflower meal e) 50% sludge-grown sunflower meal Sludge from Ley Creek Sewage Treatment Plant, Syracuse, NY which receives effluents from diverse industries and domestic users. 1 d old chicks fed diets for 15 wk. 1 composite sample/dietary group. New York, Syracuse ASV

DELIBERATE EXPOSURE; QUAIL; TERRESTRIAL; CADMIUM; ANIMAL FEEDS; WATER POLLUTION; SEWAGE SLUDGE; DIETS; KIDNEYS; LIVER; MUSCLES; EGGS; METALS

Stoewsand, G.S.; Babish, J.G.; Telford, J.N.; Bahm, C.; Bache, C.A.; Gutenmann, W.H.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 17:91-100

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7287 Eggs		a) Not given b) Not given	a) 0.01 ppm b) 0.01 ppm Dry wt	a) Control diet with 0.03 ppm Cd, dry wt b) Worm diet, 2.00 ppm Cd, dry wt Control diets contained 0.03 ppm Cd, dry wt. Worms, from uncontaminated soils in southern Ontario, were ashed, milled and incorporated as 60% of diet. Fed for 63 d. Composite samples, 15-18 birds/group. Birds can deposit, in other tissues, Cd concentrated from soil by worms. Canada ASV

DELIBERATE EXPOSURE; BIRDS; QUAIL; TERRESTRIAL; CADMIUM; EGGS; LIVER; KIDNEYS; INGESTION; BIOACCUMULATION; CANADA; SOILS

Stoewsand, G.S.; Bache, C.A.; Gutenmann, W.H.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 18:369-376

Tissue	Cases Exposure Route	Range	Mean	General Information
7288 Eggs	Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.005 ppm b) 0.009 ppm c) 0.005 ppm d) 0.008 ppm Dry wt	a) From parent generation, controls b) Treated c) From fourth generation, controls d) Treated Animals fed Cd-low diets 1 d-4 wk of age, then on dietary treatment: control oats (0.04 ppm Cd), oats grown on sewage sludge-amended soil (1.73 ppm Cd). Composite samples. New York ASV

DELIBERATE EXPOSURE; BIRDS; QUAIL; CADMIUM; TERRESTRIAL; KIDNEYS; LIVER; MUSCLES; EGGS; SEWAGE SLUDGE; DIETS; ANIMAL FEEDS

Bache, C.A.; Stoewsand, G.S.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 18:315-319

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7289 Kidney	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 0.16 ppm b) 2.41 ppm c) 6.52 ppm d) 5.42 ppm e) 25.80 ppm f) 0.43+/-0.01 ppm g) 5.42+/-0.25 ppm h) 16.52+/-4.61 ppm i) 5.57+/-1.70 ppm j) 32.40+/-8.39 ppm Dry wt	a) Males, basal diet, composite sample b) 25% control sunflower meal c) 25% sludge-grown sunflower meal d) 50% control sunflower meal e) 50% sludge-grown sunflower meal f) Females, basal diet g) As in b) h) As in c) i) As in d) j) As in e) Sludge from Ley Creek Sewage Treatment Plant, Syracuse, NY which receives effluents from diverse industries and domestic users. 1 d old chicks fed diets for 15 wk. New York, Syracuse ASV
DELIBERATE EXPOSURE; QUAIL; TERRESTRIAL; CADMIUM; ANIMAL FEEDS; WATER POLLUTION; SEWAGE SLUDGE; DIETS; KIDNEYS; LIVER; MUSCLES; EGGS; METALS Stoewsand, G.S.; Babish, J.G.; Telford, J.N.; Bahm, C.; Bache, C.A.; Gutenmann, W.H.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 17:91-100				

Tissue	Cases Exposure Route	Range	Mean	General Information
7290 Kidney	Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.19 ppm b) 2.75 ppm c) 0.23 ppm d) 2.11 ppm Dry wt	a) Control diet with 0.03 ppm Cd, dry wt, males b) Worm diet, 2.00 ppm Cd, dry wt c) Control diet, females d) Worm diet Worms, from uncontaminated soils in southern Ontario, were ashed, milled and incorporated as 60% of diet. Fed for 63 d. Composite samples, 15-18 birds/group. Birds can deposit, in tissues, Cd concentrated from soil by worms. Canada ASV
DELIBERATE EXPOSURE; BIRDS; QUAIL; TERRESTRIAL; CADMIUM; EGGS; LIVER; KIDNEYS; INGESTION; BIOACCUMULATION; CANADA; SOILS Stoewsand, G.S.; Bache, C.A.; Gutenmann, W.H.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 18:369-376				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7291 Kidney	Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) 0.243 ppm b) 0.853 ppm c) 4.500 ppm d) 6.218 ppm e) 0.245 ppm f) 0.297 ppm g) 4.383 ppm h) 2.221 ppm Dry wt	a) Parent generation, control, males b) Females c) Treated males d) females e) Fourth generation, control males f) Females g) Treated males h) Females Animals fed Cd-low diets 1 d-4 wk of age, then on dietary treatment: control oats (0.04 ppm Cd), oats grown on sewage sludge-amended soil (1.73 ppm Cd). Eggs from parents hatched, analyses on all 10 wk later. Composite samples, 4 birds each. New York ASV

DELIBERATE EXPOSURE; BIRDS; QUAIL; CADMIUM; TERRESTRIAL; KIDNEYS; LIVER; MUSCLES; EGGS; SEWAGE SLUDGE; DIETS; ANIMAL FEEDS

Bache, C.A.; Stoewsand, G.S.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 18:315-319

Tissue	Cases Exposure Route	Range	Mean	General Information
7292 Liver	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 0.07 ppm b) 1.00 ppm c) 3.09 ppm d) 2.07 ppm e) 7.63 ppm f) 0.03+/-0.01 ppm g) 0.83+/-0.32 ppm h) 2.58+/-0.53 ppm i) 1.29+/-0.27 ppm j) 5.51+/-2.11 ppm Dry wt	a) Males, basal diet, composite sample b) 25% control sunflower meal c) 25% sludge-grown sunflower meal d) 50% control sunflower meal e) 50% sludge-grown sunflower meal f) Females, basal diet g) As in b) h) As in c) i) As in d) j) As in e) Sludge from Ley Creek Sewage Treatment Plant, Syracuse, NY which receives effluents from diverse industries and domestic users. 1 d old chicks fed diets for 15 wk. New York, Syracuse ASV

DELIBERATE EXPOSURE; QUAIL; TERRESTRIAL; CADMIUM; ANIMAL FEEDS; WATER POLLUTION; SEWAGE SLUDGE; DIETS; KIDNEYS; LIVER; MUSCLES; EGGS; METALS

Stoewsand, G.S.; Babish, J.G.; Telford, J.N.; Bahm, C.; Bache, C.A.; Gutenmann, W.H.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 17:91-100

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7293 Liver	Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.14+/-0.02 ppm b) 0.92+/-0.09 ppm c) 0.05+/-0.01 ppm d) 0.86+/-0.14 ppm Dry wt	a) Control diet with 0.03 ppm Cd, dry wt, males b) Worm diet, 2.00 ppm Cd, dry wt c) Control diet, females d) Worm diet Worms, from uncontaminated soils in southern Ontario, were ashed, milled and incorporated as 60% of diet. Fed for 63 d. 15-18 birds/group. Birds can deposit, in tissues, Cd concentrated from soil by worms. Canada ASV

DELIBERATE EXPOSURE; BIRDS; QUAIL; TERRESTRIAL; CADMIUM; EGGS; LIVER; KIDNEYS; INGESTION; BIOACCUMULATION; CANADA; SOILS
Stoewsand, G.S.; Bache, C.A.; Gutenmann, W.H.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 18:369-376

Tissue	Cases Exposure Route	Range	Mean	General Information
7294 Liver	Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) 0.096 ppm b) 0.180 ppm c) 1.272 ppm d) 1.515 ppm e) 0.076 ppm f) 0.052 ppm g) 1.686 ppm h) 1.148 ppm Dry wt	a) Parent generation, control, males b) Females c) Treated males d) females e) Fourth generation, control males f) Females g) Treated males h) Females Animals fed Cd-low diets 1 d-4 wk of age, then on dietary treatment: control oats (0.04 ppm Cd), oats grown on sewage sludge-amended soil (1.73 ppm Cd). Eggs from parents hatched, analyses on all 10 wk later. Composite samples, 4 birds each. New York ASV

DELIBERATE EXPOSURE; BIRDS; QUAIL; CADMIUM; TERRESTRIAL; KIDNEYS; LIVER; MUSCLES; EGGS; SEWAGE SLUDGE; DIETS; ANIMAL FEEDS
Bache, C.A.; Stoewsand, G.S.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 18:315-319

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7295 *Muscle*	15 *Ingestion*	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 0.011+/-0.005 ppm b) 0.030+/-0.023 ppm c) 0.026+/-0.008 ppm d) 0.011+/-0.008 ppm e) 0.071+/-0.005 ppm f) 0.007+/-0.002 ppm g) 0.016+/-0.004 ppm h) 0.037+/-0.006 ppm i) 0.030+/-0.004 ppm j) 0.067+/-0.026 ppm Dry wt	a) Males, basal diet, composite sample b) 25% control sunflower meal c) 25% sludge-grown sunflower meal d) 50% control sunflower meal e) 50% sludge-grown sunflower meal f) Females, basal diet g) As in b) h) As in c) i) As in d) j) As in e) Sludge from Ley Creek Sewage Treatment Plant, Syracuse, NY which receives effluents from diverse industries and domestic users. 1 d old chicks fed diets for 15 wk. New York, Syracuse ASV
DELIBERATE EXPOSURE; QUAIL; TERRESTRIAL; CADMIUM; ANIMAL FEEDS; WATER POLLUTION; SEWAGE SLUDGE; DIETS; KIDNEYS; LIVER; MUSCLES; EGGS; METALS Stoewsand, G.S.; Babish, J.G.; Telford, J.N.; Bahm, C.; Bache, C.A.; Gutenmann, W.H.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 17:91-100				

Tissue	Cases Exposure Route	Range	Mean	General Information
7296 Muscle	Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.007 ppm b) 0.006 ppm c) 0.010 ppm d) 0.029 ppm Dry wt	a) Parent generation, control, males b) Females c) Treated males d) females Animals fed Cd-low diets 1 d-4 wk of age, then on dietary treatment: control oats (0.04 ppm Cd), oats grown on sewage sludge-amended soil (1.78 ppm Cd). Eggs from parents hatched, analyses on all 10 wk later. Composite samples, 4 birds each. New York ASV
DELIBERATE EXPOSURE; BIRDS; QUAIL; CADMIUM; TERRESTRIAL; KIDNEYS; LIVER; MUSCLES; EGGS; SEWAGE SLUDGE; DIETS; ANIMAL FEEDS Bache, C.A.; Stoewsand, G.S.; Lisk, D.J. 1986 Journal of Toxicology and Environmental Health 18:315-319				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Rabbit

Tissue	Cases Exposure Route	Range	Mean	General Information
7297 Heart	a) 8 b) 8 Ingestion	a) Not given b) Not given	a) <0.03 ug/g b) 0.6+/-0.1 ug/g S.E. Wet wt	a) Controls, unexposed b) Received 20 ug/ml Ca as Cd-Cl2 in drinking water for 9 mo. Evaluation of mechanisms which regulate cardiovascular homeostasis. Male New Zealand rabbits, 3 mo old. *Specific, multiple effects on cardiovascular system.* AAS
7298 Kidney	a) 8 b) 8 Ingestion	a) Not given b) Not given	a) 0.7+/-0.2 ug/g b) 175.8+/-15.6 ug/g S.E. Wet wt	a) Controls, unexposed b) Received 20 ug/ml Ca as Cd-Cl2 in drinking water for 9 mo. Evaluation of mechanisms which regulate cardiovascular homeostasis. Male New Zealand rabbits, 3 mo old. *Specific, multiple effects on cardiovascular system.* AAS

DELIBERATE EXPOSURE; CADMIUM; ZINC; COPPER; INGESTION; KIDNEYS; HEART; CARDIAC EFFECTS; HYPERTENSION; CARDIOVASCULAR EFFECTS; RABBITS

Boscolo, P.; Carmignani, M. 1986 British Journal of Industrial Medicine 43:605-610

Tissue	Cases Exposure Route	Range	Mean	General Information
7299 Liver	5	0.16-0.22 ppm Wet wt	0.19 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7300 Muscle	5	0.04-0.11 ppm Wet wt	0.07 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Cadmium

7440-43-9

Cd

AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Rabbit, New Zealand

Tissue	Cases Exposure Route	Range	Mean	General Information
7301 Blood, whole	a) 8 b) 8 c) 8 Injection	a) Not given b) Not given c) Not given	a) 1299+/-145 ug/L b) 31.8+/-12.1 ug/L c) <1.0 ug/L S.E. Wet wt	a) Dose of 1.5 mg/day b) Dose of 0.15 mg/day c) Control After injection as chloride at rate of 2.5 uL/hr for 28 days by means of subcutaneously implanted osmotic pumps. Values, estimated from graph, were 280, 600 and 825 ug/L on days 7, 14, and 21, respectively. Values for plasma on days 7, 14, 21 and 28 were 50, 125, 55 and 55 ug/L (estimated from graph). AAS
7302 Brain	a) 8 b) 8 c) 8 Injection	a) Not given b) Not given c) Not given	a) 254.4+/-12.9 ug/kg b) 61.3+/-8.8 ug/kg c) <10 ug/kg S.E. Wet wt	a) Dose of 1.5 mg/day b) Dose of 0.15 mg/day c) Control After injection as chloride at rate of 2.5 uL/hr for 28 days by means of subcutaneously implanted osmotic pumps. AAS
7303 Kidney	23 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 227,044+/-68,346 ug/kg b) 81,347+/-23,099 ug/kg c) 38,396+/-3503 ug/kg d) 29,564+/-7520 ug/kg e) 149+/-36 ug/kg f) <10 ug/kg S.E. Wet wt	a) Dose of 1.5 mg/d, cortex, 8 cases b) Medulla c) Dose of 0.15 mg/d, cortex, 8 cases d) Medulla e) Control, cortex, 7 cases f) Medulla After injection as chloride at rate of 2.5 uL/hr for 28 days by means of subcutaneously implanted osmotic pumps. AAS
7304 Liver	a) 8 b) 8 c) 8 Injection	a) Not given b) Not given c) Not given	a) 180,352+/-18,486 ug/kg b) 9695+/-1235 ug/kg c) 27.8+/-23.3 ug/kg S.E. Wet wt	a) Dose of 1.5 mg/day b) Dose of 0.15 mg/day c) Control After injection as chloride at rate of 2.5 uL/hr for 28 days by means of subcutaneously implanted osmotic pumps. AAS
7305 Muscle	a) 8 b) 8 c) 8 Injection	a) Not given b) Not given c) Not given	a) 1059+/-167 ug/kg b) 111.7+/-34.2 ug/kg c) <10 ug/kg S.E. Wet wt	a) Dose of 1.5 mg/day b) Dose of 0.15 mg/day c) Control After injection as chloride at rate of 2.5 uL/hr for 28 days by means of subcutaneously implanted osmotic pumps. AAS

DELIBERATE EXPOSURE; RABBITS; CADMIUM; BLOOD; KIDNEYS; LIVER; BRAIN; HEART; MUSCLES; BIOACCUMULATION; METALS; TERRESTRIAL

DuVal, G.; Grubb, B.R. 1986 Biological Trace Element Research 9:101-111

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Rat, brown
RATTUS NORVERGICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7306 Liver	5	0.18-0.21 ppm Wet wt	0.19 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7307 Muscle	5	0.07-0.18 ppm Wet wt	0.11 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.001 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Redshank, Icelandic
TRINGA TOTANUS ROBUSTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7308 Feathers	a) 23 b) 17	a) Not applicable b) Not applicable	a) Not detected b) Not detected	a) Shaft b) Vane Limit of detection was 0.02+/-0 mg/kg (shaft) and 0.05+/-0.00 mg/kg (vane). Dutch Wadden Sea AAS
7309 Kidney	a) 1 b) 1 c) 1	a) Not given b) Not given c) Not given	a) 3.94 mg/kg b) 8.86 ug/kg c) 23.36 ug/kg	a) Male b) Female c) Female Dutch Wadden Sea AAS

FEATHERS; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; METALS; CADMIUM; LEAD; BIOACCUMULATION; WATER POLLUTION

Goede, A.A.; de Voogt, P. 1985 Environmental Pollution (Series A) 37:311-322

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Reindeer
RANGIFER TARANDUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7310 Kidney	204	Not given	5.7+/-5.2 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
7311 Liver	248	Not given	1.1+/-0.7 ppm Wet wt	Collected 1983-1984. Other data included demonstrated Cd accumulation with age of animals, and heavier contamination in southern Norway than in the north. Norway AAS
NORWAY; CADMIUM; LIVER; KIDNEYS; DEER; MOOSE; REINDEER; ENVIRONMENTAL EXPOSURE; CERVIDES; TERRESTRIAL Froslie, A.; Haugen, A.; Holt, G.; Norheim, G. 1986 Bulletin of Environmental Contamination and Toxicology 37:453-460				

Robin, American
TURDUS MIGRATORIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7312 Body	6	1.2-7.3 mg/kg Dry wt	Not given	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Salamander, red-backed
PLETHODON CINEREUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7313 Body, whole	a) 6 b) 1	a) Not given b) Not applicable	a) 2.6 mg/kg b) 1.1 mg/kg Dry wt	a) Pooled specimens b) Single specimen Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Salamander, slimy
PLETHODON GLUTINOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7314 Body, whole	a) 2 b) 2	a) Not given b) 0.9-1.0 mg/kg Dry wt	a) 1.1 mg/kg b) 0.95 mg/kg Dry wt	a) Pooled specimens b) Analyzed individually Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Salmon
SALMO sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7315 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.
REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH Sherlock, J.C. 1984 Experientia 40(2):152-156				

Scallop
PLACOPECTEN MAGELLANICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7316 Gills	38	Not given	17 ug/g	From Georges Bank, Browns Bank, and off Navy Island near St. Andrews. Size 70-126 mm. Canada, New Brunswick AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Scallop
PLACOPECTEN MAGELLANICUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7317 Mantle	38	Not given	9.9 ug/g	From Georges Bank, Browns Bank, and off Navy Island near St. Andrews. Size 70-126 mm. Canada, New Brunswick AAS
7318 Muscle	38	a) Not given b) 0.8-1.6 ug/g c) 5.4-36.3 ug/g d) 3.2-20.2 ug/g e) 6.4-19.0 ug/g f) 3.2-9.7 ug/g g) 5.6-20.2 ug/g h) 2.9-10.5 ug/g Dry wt	a) 11 ug/g b) 1.1 ug/g c) 18.9 ug/g d) 11.6 ug/g e) 13.6 ug/g f) 6.7 ug/g g) 14.0 ug/g h) 5.0 ug/g Dry wt	a) All sites b) Navy Island c) Browns Bank d) Georges Bank, 1st site, all sizes e) Small size, <90 mm f) Medium, 90-110 mm g) Large, >110 mm h) Georges Bank, 2nd site, medium size. Canada, New Brunswick AAS
MUSCLES; GILLS; MANTLE; VISCERA; SCALLOPS; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; COPPER; CADMIUM; LEAD; ZINC; BIOCONCENTRATION Ray, S.; Woodside, M.; Jerome, V.E.; Akagi, H. 1984 Chemosphere 13(11):1247-1254				

Tissue	Cases Exposure Route	Range	Mean	General Information
7319 Muscle				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Tissue	Cases Exposure Route	Range	Mean	General Information
7320 Viscera	38	Not given	290 ug/g	From Georges Bank, Browns Bank, and off Navy Island near St. Andrews. Size 70-126 mm. Canada, New Brunswick AAS
MUSCLES; GILLS; MANTLE; VISCERA; SCALLOPS; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; COPPER; CADMIUM; LEAD; ZINC; BIOCONCENTRATION Ray, S.; Woodside, M.; Jerome, V.E.; Akagi, H. 1984 Chemosphere 13(11):1247-1254				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Scaup, lesser
AYTHYA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7321 Bone	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 0.25+/-0.05 mg/kg b) 0.31+/-0.06 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7322 Feathers	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 0.58+/-0.29 mg/kg b) 0.37+/-0.16 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Seal, harbor
PHOCA VITULINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7323 Brain				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
7324 Kidney				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE Eisler, R. 1984 Biological Trace Element Research 6:165-180				

Tissue	Cases Exposure Route	Range	Mean	General Information
7325 Kidney	14	1.93-26.34 ug/g Wet wt	9.71+/-7.88 ug/g Wet wt	Collected 4/10/84 in ice drift area. Males and females, body length mean of 129+/-19 cm, range 90-152 cm. Japan, Hokkaido, Monbetsu City, Okhotsk Sea ICP-AES
ENVIRONMENTAL EXPOSURE; AQUATIC; SEALS; JAPAN; LIVER; KIDNEYS; METALS; CADMIUM; COPPER; ZINC; MERCURY; METALLOTHIONEIN; AGE Tohyama, C.; Himeno, S.-I.; Watanabe, C.; Suzuki, T.; Morita, M. 1986 Ecotoxicology and Environmental Safety 12:85-94				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Seal, harbor
PHOCA VITULINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7326 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Tissue	Cases Exposure Route	Range	Mean	General Information
7327 Liver	11	1.12-11.59 ug/g Wet wt	3.81+/-3.30 ug/g Wet wt	Collected 4/10/84 in ice drift area. Males and females, body length mean of 129+/-19 cm, range 90-152 cm. Japan, Hokkaido, Monbetsu City, Okhotsk Sea ICP-AES

ENVIRONMENTAL EXPOSURE; AQUATIC; SEALS; JAPAN; LIVER; KIDNEYS; METALS; CADMIUM; COPPER; ZINC; MERCURY; METALLOTHIONEIN; AGE

Tohyama, C.; Himeno, S.-I.; Watanabe, C.; Suzuki, T.; Morita, M. 1986 Ecotoxicology and Environmental Safety 12:85-94

Shad, American
ALOSA SAPIDISSIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7328 Gonads	5	0.10-1.04 ug/g	0.42 ug/g	Collected May, 1979, waters of Hartford County. Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
7329 Muscle	5	0.10-0.16 ug/g	0.138 ug/g	Collected May, 1979, waters of Hartford County. Detection limit 0.01. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Shad, gizzard
DOROSOMA CEPEDIANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7330 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.13 ug/g b) 0.10 ug/g c) 0.10 ug/g d) 0.13 ug/g e) 0.10 ug/g f) 0.10 ug/g g) 0.10 ug/g h) 0.13 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Lake Fausse Point c) Little Pigeon Bayou d) Grand Lake e) Henderson Lake f) Bayou Petite Prairie g) Spring Bayou h) Raccouri Old River Collected 6/81. Louisiana, Atchafalaya River Basin ES
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Shearwater, Cory's
CALONECTRIS DIOMEDEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7331 Adipose	a) 5 b) 5 c) 5	a) Not given b) Not given c) Not given	a) 0.33+/-0.04 ug/g b) 1.35+/-0.98 ug/g c) 1.12+/-0.67 ug/g Dry wt	a) Majorca Island, Mediterranean, 5/84 b) Linosa Island, Mediterranean, 5/82 c) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples AAS
7332 Brain	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.97+/-0.40 ug/g b) 3.00+/-0.73 ug/g c) 2.63+/-1.62 ug/g d) 1.06+/-1.73 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples AAS

(next page)

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Shearwater, Cory's
CALONECTRIS DIOMEDEA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7333 Eggs	a) 20 b) 10 c) 11 d) 2	a) Not given b) Not given c) Not given d) Not given	a) <0.03 ug/g b) <0.03 ug/g c) <0.03 ug/g d) <0.03 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Detection limit 0.03 ug/g. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples AAS
7334 Kidney	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 214.17+/-45.85 ug/g b) 42.82+/-5.88 ug/g c) 106.21+/-46.80 ug/g d) 187.50+/-62.62 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples AAS
7335 Liver	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 26.45+/-1.30 ug/g b) 7.52+/-2.38 ug/g c) 13.9+/-15.7 ug/g d) 55.92+/-39.76 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples AAS
7336 Muscle	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 2.07+/-1.10 ug/g b) 3.93+/-1.09 ug/g c) 2.97+/-0.46 ug/g d) 2.00+/-0.78 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples AAS
7337 Uropygial gland	a) 3 b) 5 c) 5 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 0.21+/-0.02 ug/g b) 0.54+/-0.20 ug/g c) 1.29+/-1.57 ug/g d) 0.77+/-0.38 ug/g Dry wt	a) Selvagen Island, Atlantic, 4/83 b) Majorca Island, Mediterranean, 5/84 c) Linosa Island, Mediterranean, 5/82 d) Crete Island, Mediterranean, 4/83 Adults. Mediterranean Sea; Atlantic Ocean Shells thinner in Mediterranean samples AAS

ENVIRONMENTAL EXPOSURE; BIRDS; ATLANTIC OCEAN; MEDITERRANEAN SEA; AQUATIC; EGGS; BRAIN; MUSCLES; KIDNEYS; LIVER; UROPYGIAL GLAND; ADIPOSE TISSUE; MERCURY; CADMIUM; LEAD; ZINC; SELENIUM; HEXACHLOROBENZENE; DDE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; WATER POLLUTION; METALS; PESTICIDES

Renzoni, A.; Focardi, S.; Fossi, C.; Leonzio, C.; Mayol, J. 1986 Environmental Pollution (Series A) 40:17-35

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7338 Bone	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 3.1+/-0.4 ug/g b) 3.2+/-0.4 ug/g c) 2.3+/-0.4 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7339 Kidney	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 2.4+/-0.2 ug/g b) 3.1+/-0.2 ug/g c) 3.7+/-0.2 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE

Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424

Tissue	Cases Exposure Route	Range	Mean	General Information
7340 Kidney	a) 3 b) 3 c) 3 d) 3 e) 3 f) 3 g) 3 h) 3 i) 3 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given i) Not given	a) 23.7 umol/kg b) 19.3 umol/kg c) 18.3 umol/kg d) 62.7 umol/kg e) 54.7 umol/kg f) 21.3 umol/kg g) 83.0 umol/kg h) 85.0 umol/kg i) 29.0 umol/kg	a) At 24 wk, grazing 6 km from smelter b) 15 km c) 40 km d) At 50 wk, grazing 6 km from smelter e) 15 km f) 40 km g) At 98 wk, grazing 6 km from smelter h) 15 km i) 40 km Data from additional times and distances included. Pb/Zn smelting complex with soil contamination. 1978-79. Cortex. Australia, South Australia, Port Pirie AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; COPPER; LEAD; CADMIUM; ZINC; BLOOD; BLOOD PLASMA; KIDNEYS; LIVER; BONES; SHEEP; SMELTERS; LAND POLLUTION; AUSTRALIA

Koh, T.-S.; Judson, G.J. 1986 Bulletin of Environmental Contamination and Toxicology 37:87-95

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7341 Liver	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 0.5+/-0.07 ug/g b) 0.6+/-0.07 ug/g c) 0.8+/-0.07 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE

Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424

Tissue	Cases Exposure Route	Range	Mean	General Information
7342 Liver	a) 3 b) 3 c) 3 d) 3 e) 3 f) 3 g) 3 h) 3 i) 3 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given i) Not given	a) 17.0 umol/kg b) 8.8 umol/kg c) 1.8 umol/kg d) 18.4 umol/kg e) 10.6 umol/kg f) 2.7 umol/kg g) 22.4 umol/kg h) 12.2 umol/kg i) 1.4 umol/kg	a) At 24 wk, grazing 6 km from smelter b) 18 km c) 40 km d) At 50 wk, grazing 6 km from smelter e) 18 km f) 40 km g) At 98 wk, grazing 6 km from smelter h) 18 km i) 40 km Data from additional times and distances included. Pb/Zn smelting complex with soil contamination. 1978-79. Australia, South Australia, Port Pirie AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; COPPER; LEAD; CADMIUM; ZINC; BLOOD; BLOOD PLASMA; KIDNEYS; LIVER; BONES; SHEEP; SMELTERS; LAND POLLUTION; AUSTRALIA

Koh, T.-S.; Judson, G.J. 1986 Bulletin of Environmental Contamination and Toxicology 37:87-95

Tissue	Cases Exposure Route	Range	Mean	General Information
7343 Muscle	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) <.07 ug/g b) <.07 ug/g c) <.07 ug/g Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

(next page)

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Sheep
OVIS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7344 Spleen	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 0.4+/-0.05 ug/g b) 0.4+/-0.05 ug/g c) 0.5+/-0.05 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE

Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 *Journal of Animal Science* 59(2):416-424

Shoveler
ANAS CLYPEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7345 Bone	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 0.21+/-0.04 mg/kg b) 0.16+/-0.06 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7346 Feathers	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 0.09+/-0.02 mg/kg b) 0.07+/-0.03 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS

Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Shrew, short-tailed
BLARINA BREVICAUDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7347 Body	a) 13 b) 7	a) Not given b) Not given	a) 4.8+/-1.6 mg/kg b) 7.3+/-1.1 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Shrimp
CRANGON CRANGON

Tissue	Cases Exposure Route	Range	Mean	General Information
7348 Body	20	0.003-0.12 mg/kg Wet wt	0.036 mg/kg Wet wt	Analyzed cooked and unpeeled. Mixed samples weighing about 20 kg. Collected from Western Wadden Sea, 1977-84. Netherlands DPASV
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Tissue	Cases Exposure Route	Range	Mean	General Information
7349 Muscle	a) 30 b) 30 c) 30 d) 30	a) Not given b) Not given c) Not given d) Not given	a) 0.27+/-0.32 ug/g b) 0.18+/-0.11 ug/g c) 0.12+/-0.06 ug/g d) 0.13+/-0.08 ug/g Dry wt	a) Aquaculture pond, seawater with 10% mixture of effluent, low density (4.5 shrimp/sq m), 29% survival b) Same effluent mixture, high density (30 shrimp/sq m), 27% survival c) Seawater only, fed Purina Ration, low density (6.0 shrimp/sq m), 50% survival Effluent from Harbor Branch Foundation treatment plant, seawater from Harbor Branch Foundation ship canal. Florida, Fort Pierce AAS
MUSCLES; AQUATIC; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; CRUSTACEANS; CADMIUM; SELENIUM; CHROMIUM; COPPER; LEAD; WATER POLLUTION; FLORIDA Landau, M.; Pierce, R.H.; Williams. L.D.; Norris, D.R. 1985 Bulletin of Environmental Contamination and Toxicology 35:537-545				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Shrimp, brine
ARTEMIA SALINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7350 Body, whole		a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.06+/-0.01 ug/g b) 0.36+/-0.01 ug/g c) 7.54+/-0.13 ug/g d) 5.40+/-0.04 ug/g S.E. Wet wt	a) Unexposed controls, particulate fraction contained 0.03+/-0.01 and cytosol 0.02+/-0.01 ug/ b) Exposure to 0.50 mg/L, particulate 0.25+/-0.01, cytosol 0.27+/-0.01 ug/g c) Exposure to 2.0 mg/L, particulate 5.13+/-0.34 ug/g, cytosol 1.92+/-0.71 ug/g d) Exposure to 5.0 mg/L, particulate 2.28+/-0.72, cytosol 4.55+/-0.65 ug/g Each value from 3 determinations. Animals raised in these sublethal levels for 7 days. Discussed distribution in high/low molecular wt fractions. Growth inhibition, decreased activity, food consumption, wt and length in 5 ppm; group, days 4,5 AAS
SHRIMP; CADMIUM; BODY; AQUATIC; DELIBERATE EXPOSURE; WATER POLLUTION; PROTEINS; BIOACCUMULATION Jayasekara, S.; Drown, D.B.; Sharma, R.P. 1986 Ecotoxicology and Environmental Safety 11:23-30				

Shrimp, pink
PENAEUS DUORARUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7351 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.
REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH Sherlock, J.C. 1984 Experientia 40(2):152-156				

Slug
PHILOMYCUS CAROLINIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7352 Body, whole		Not given	20 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Slugs not observed at Palmerton, 2 km downwind. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Snake, northern water
NERODIA SIPEDON

Tissue	Cases Exposure Route	Range	Mean	General Information
7353 Body	a) 15 b) 15 c) 14 d) 11 e) 10 f) 15	a) Not applicable b) Not applicable c) Not detected-0.12 ppm d) Not applicable e) Not applicable f) Not applicable Wet wt	a) Not detected b) Not detected c) 0.06 ppm d) Not detected e) Not detected f) Not detected Wet wt Geometric mean	a) Irondale, Big River b) Deslodge c) Brown's Ford d) Upper River, Black River e) Clearwater Lake f) Lower River Collection sites. Big River polluted by Pb tailings from mining begun in 1700's and continued through 1972. Black River drains currently mined area. Limit of detection 0.1 ppm. Missouri, Big River, Black River ICP-AES
Niethammer, K.R.; Atkinson, R.D.; Baskett, T.S.; Samson, F.B. 1985				

Sole
SOLEA SOLEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7354 Body	22	0.001-0.010 mg/kg Wet wt	0.004 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1977-84. Netherlands DPASV
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Sparrow, field
SPIZELLA PUSILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7355 Body	1	Not applicable	1.4 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Sponge
SPIRASTRELLA CUSPIDIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7356 Body		15-225 ug/g Dry wt	68 ug/g Dry wt	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Sponge (P. foetida)
PROSTYLYSSA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7357 Body		0-0.1 ug/g Dry wt	Not given	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Stickleback
GASTEROSTEUS ACULEATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7358 Body		Not given	2 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS

BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION

Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Stilt, black-necked
HIMANTOPUS MEXICANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7359 Liver	a) 5 b) 5 c) 5	a) 0.2-0.6 ppm b) 0.2-0.9 ppm c) 0.2-0.5 ppm Wet wt	a) 0.3 ppm b) 0.4 ppm c) 0.4 ppm Wet wt Geometric means	a) Controls, 6/82 b) Dredge-pits, 11/81 c) Dredge-pits, 5/82 Controls gathered at Port Mansfield or Powderhorn Lake. Treatment gathered at Neuces Bay, Corpus Christi, at two times while impoundment area was covered with water and attractive to birds. Impoundment contained sediment from dredging operations. Limit of detection 0.3 ppm. Texas AAS

LIVER; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; METAL POISONING; LEAD POISONING; LEAD; ZINC; CADMIUM; MERCURY; SELENIUM; ANIMAL POPULATIONS; BIOACCUMULATION; WATER POLLUTION; INDUSTRIAL POLLUTION; INDUSTRIAL PLANTS
White, D.H.; Cromartie, E. 1985 Bulletin of Environmental Contamination and Toxicology 34:295-300

Sunfish
LEPOMIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7360 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.10 ug/g b) 0.10 ug/g c) 0.10 ug/g d) 0.10 ug/g Wet wt Geometric	a) Composite samples from Lake Verret b) Grand Lake c) Bayou Petite Prairie d) Spring Bayou Collected 6/81. Louisiana, Atchafalaya River Basin ES

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Sunfish, redbreast
LEPOMIS AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7361 Muscle	2	0.002-0.003 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7362 Muscle	2	0.002-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Swallow, northern rough-winged
STELGIDOPTERYX SERRIPENNIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7363 Body	a) 19 b) 12 c) 9 d) 20 e) 20 f) 8	a) Not detected-0.40 ppm b) Not detected-0.24 ppm c) Not detected-0.19 ppm d) Not detected-0.28 ppm e) Not detected-0.42 ppm f) Not applicable Wet wt	a) 0.08 ppm b) 0.14 ppm c) 0.11 ppm d) 0.09 ppm e) 0.12 ppm f) Not detected Wet wt Geometric mean	a) Irondale, Big River b) Deslodge c) Brown's Ford d) Upper River, Black River e) Clearwater Lake f) Lower River Collection sites. Big River polluted by Pb tailings from mining begun in 1700's and continued through 1972. Black River drains currently mined area. Limit of detection 0.1 ppm. Missouri, Big River, Black River ICP-AES

Niethammer, K.R.; Atkinson, R.D.; Baskett, T.S.; Samson, F.B. 1985

Tanager, scarlet
PIRANGA OLIVACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7364 Body	2	0.77-0.91 mg/kg Dry wt	0.84 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS
Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Teal, green-winged
ANAS CRECCA

Tissue	Cases Exposure Route	Range	Mean	General Information
7365 Bone	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 0.74+/-0.15 mg/kg b) 0.39+/-0.03 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7366 Feathers	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 0.21+/-0.05 mg/kg b) 0.43+/-0.16 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS

Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172

Tissue	Cases Exposure Route	Range	Mean	General Information
7367 Liver	a) 4 b) 5	a) 0.1-0.3 ppm b) 0.1-0.5 ppm Wet wt	a) 0.2 ppm b) 0.3 ppm Wet wt Geometric means	a) Controls, 11/81 b) Dredge-pits, 1/82 Controls gathered at Port Mansfield or Powderhorn Lake. Treatment gathered at Neuces Bay, Corpus Christi, at time while impoundment area was covered with water and attractive to birds. Impoundment contained sediment from dredging operations. Limit of detection 0.3 ppm. Texas AAS

LIVER; KIDNEYS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; METAL POISONING; LEAD POISONING; LEAD; ZINC; CADMIUM; MERCURY; SELENIUM; ANIMAL POPULATIONS; BIOACCUMULATION; WATER POLLUTION; INDUSTRIAL POLLUTION; INDUSTRIAL PLANTS

White, D.H.; Cromartie, E. 1985 Bulletin of Environmental Contamination and Toxicology 34:295-300

Thousand-legs (millipede)
SPIROBILIDA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7368 Body		Not given	3.0 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Thrasher, brown
TOXOSTOMA RUFUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7369 Body	1	Not applicable	4.4 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Thrush, wood
HYLOCICHLA MUSTELINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7370 Body	a) 5 b) 2	a) 0.85-3.3 mg/kg b) 1.6-4.0 mg/kg Dry wt	a) Not given b) 2.8 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Tilefish
LOPHOLATILUS CHAMAELEONTICEPS

Tissue	Cases Exposure Route	Range	Mean	General Information
7371 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE Eisler, R. 1984 Biological Trace Element Research 6:165-180				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Toad, African clawed
XENOPUS LAEVIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7372 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.04+/-0.01 ug/kg b) 2.35+/-0.31 ug/kg c) 0.05+/-0.01 ug/kg d) 3.77+/-0.25 ug/kg Wet wt	a) Control, 50 d b) 29 ug/L exposure, 50 d c) Control, 100 d d) 29 ug/L exposure, 100 d Two mixtures of 2 test animals per group. Hard water.
7373 Kidney	a) 4 b) 4	a) Not given b) Not given	a) 0.76+/-0.21 ug/kg b) 8.22+/-1.86 ug/kg Wet wt	a) Control b) 29 ug/L exposure, 100 d Hard water.
7374 Liver	a) 4 b) 4	a) Not given b) Not given	a) 0.26+/-0.16 ug/kg b) 4.02+/-3.09 ug/kg Wet wt	a) Control b) 29 ug/L exposure, 100 d Hard water.
AMPHIBIANS; DELIBERATE EXPOSURE; AQUATIC; CADMIUM; BIOACCUMULATION; BODY; LIVER; KIDNEYS; WATER POLLUTION; TOADS Canton, J.H.; Slooff, W. 1982 Ecotoxicology and Environmental Safety 6:113-128				

Toad, American
BUFO AMERICANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7375 Body, whole	5	0.9-2.1 mg/kg Dry wt	1.52 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Toad, Woodhouse's
BUFO WOODHOUSEI

Tissue	Cases Exposure Route	Range	Mean	General Information
7376 Body, whole	3	1.0-1.6 mg/kg Dry wt	1.2 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Towhee, rufous-sided
PIPILO ERYTHROPHTHALMUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7377 Body	1	Not applicable	1.3 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Trout, cutthroat
SALMO CLARKI

Tissue	Cases Exposure Route	Range	Mean	General Information
7378 Muscle		Not given	0.5 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS

BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION

Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
7379 Liver		Not given	20 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS
7380 Muscle		Not given	0.5 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS

BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION

Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Trout, sea

Tissue	Cases Exposure Route	Range	Mean	General Information
7381 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH

Sherlock, J.C. 1984 Experientia 40(2):152-156

Turtle, snapping
CHELYDRA SERPENTINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7382 Kidney	a) 7 b) 6 c) 8 d) 3 e) 8	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.07+/-0.05 ppm b) 0.07+/-0.04 ppm c) 0.24+/-0.18 ppm d) 0.30+/-0.37 ppm e) 0.09+/-0.06 ppm Wet wt	a) Males, uncontaminated area of Maryland b) Females c) Contaminated brackish water, Hakensack Meadowlands New Jersey, males d) Females e) Contaminated fresh water, New Jersey, males Collected 6-8/81 and 6-8/82. Frequency of detection 41%. Detection limit 0.1 ppm. New Jersey; Maryland Lowered lipid content, reduced growth in animals from brackish-water area in NJ AAS
7383 Liver	a) 7 b) 6 c) 8 d) 3 e) 8	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.07+/-0.04 ppm b) 0.06+/-0.03 ppm c) 0.10+/-0.06 ppm d) 0.08+/-0.05 ppm e) 0.08+/-0.07 ppm Wet wt	a) Males, uncontaminated area of Maryland b) Females c) Contaminated brackish water, Hakensack Meadowlands New Jersey, males d) Females e) Contaminated fresh water, New Jersey, males Collected 6-8/81 and 6-8/82. Frequency of detection 28%. Detection limit 0.1 ppm. New Jersey; Maryland Lowered lipid content, reduced growth in animals from brackish-water area in NJ AAS

ENVIRONMENTAL EXPOSURE; TURTLES; AQUATIC; LIVER; KIDNEYS; ADIPOSE TISSUE; NEW JERSEY; MARYLAND; CADMIUM; CHROMIUM; COPPER; LEAD; MERCURY; NICKEL; ZINC; CHLORDANE; NONACHLOR; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDES; METALS; WATER POLLUTION

Albers, P.H.; Sileo, L.; Mulhern, B.M. 1986 Archives of Environmental Contamination and Toxicology 15:39-49

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Underwing (moth)
CATOCALA PALAEOGAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7384 Body		a) Not given b) Not given	a) 0.38 mg/kg b) 0.72 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Underwing, copper
AMPHIPYRA PYRAMIDOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
7385 Body		a) Not given b) Not given	a) 0.64 mg/kg b) 5.2 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Warbler

Tissue	Cases Exposure Route	Range	Mean	General Information
7386 Body	1	Not applicable	1.3 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Warbler, black-and-white
MNIOTILTA VARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
7387 Body	a) 1 b) 1	a) Not applicable b) Not applicable	a) 0.66 mg/kg b) 1.4 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Warbler, yellow-throated
DENDROICA DOMINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7388 Body	1	Not applicable	1.2 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Weevil, waterhyacinth
NEOCHETINA EICHHORNIAE

Tissue	Cases Exposure Route	Range	Mean	General Information
7389 Body	a) 50 b) 50 c) 50 Ingestion	a) Not given b) Not given c) Not given	a) 6.52 ug/g b) 14.46 ug/g c) 36.67 ug/g Dry wt	a) Controls, no Pb in water, 0.06 ug/g in leaves b) 0.5 ug/L, 8.00 ug/g in water and leaves, respectively c) 1.0 ug/L, 17.20 ug/g in water, leaves Animals from Camp's Canal and River Styx fed waterhyacinth leaves grown with or without metal added to medium. Florida, Alachua County 10- and 20-day mortalities for each group were: 0.08 and 2.8, 0.8 and 1.0, 0.0 and 0.0 AAS
DELIBERATE EXPOSURE; AQUATIC; BODY; WEEVILS; LEAD; CADMIUM; COPPER; FLORIDA; WATER POLLUTION; VEGETATION; METALS; INGESTION; INSECTS Kay, S.H.; Haller, W.T. 1986 Bulletin of Environmental Contamination and Toxicology 37:239-245				

Cadmium
7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Whelk

Tissue	Cases Exposure Route	Range	Mean	General Information
7390 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH
Sherlock, J.C. 1984 Experientia 40(2):152-156

Whiting
MERLANGIUS MERLANGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7391 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH
Sherlock, J.C. 1984 Experientia 40(2):152-156

Winkle

Tissue	Cases Exposure Route	Range	Mean	General Information
7392 Body				Review. Sources in food, effects of increased environmental levels on levels in plant-based foods, fish, shellfish, meat, offal, dairy produce discussed. Normal dietary intakes and their elevation by environmental pollution or atypical diets also considered.

REVIEW; BODY; MILK; FISHES; SHRIMP; CRABS; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; CADMIUM; FOOD CONTAMINATION; FOODS; HEALTH HAZARDS; WATER POLLUTION; MOLLUSKS; SMELTERS; AIR POLLUTION; SHELLFISH
Sherlock, J.C. 1984 Experientia 40(2):152-156

Cadmium

7440-43-9
Cd
AtW 112.40, MP 321 C, BP 765 C, VP 1 mm Hg at 394 C, 10 mm Hg at 486 C

Worm, annelid
EISENOIDES CAROLINENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7393 Body, whole		Not given	62 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Earthworms not observed at Palmerton, 2 km downwind. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Zooplankton

Tissue	Cases Exposure Route	Range	Mean	General Information
7394 Body		Not given	12 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS
BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362				

Tissue	Cases Exposure Route	Range	Mean	General Information
7395 Body		Not applicable	0.21 ug/g	Collected 8/83 from polluted lake. Levels of 4.6 ug/L and 4.31 mg/kg (means) in water and sediment, respectively. India, Hyderabad, Lake Husainsagar AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; ZOOPLANKTON; CADMIUM; COPPER; BODY; WATER POLLUTION; INDIA; BIOMAGNIFICATION Prahalad, A.K.; Seenayya, G. 1986 Archives of Environmental Contamination and Toxicology 15:417-425				

Cadmium, isotope of mass 109
14109-32-1
Cd
Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7396 Abomasum	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 1.0% b) 0.67%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7397 Bone	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 3.08% b) 2.74%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Bone=10% body wt. Gamma spectrometry
7398 Cecum	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.075% b) 0.089%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7399 Colon	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.073% b) 0.19%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7400 Heart	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.049% b) 0.054%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7401 Intestine, duodenum	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.59% b) 0.54%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7402 Intestine, ileum	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.15% b) 0.038%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry

(next page)

Cadmium, isotope of mass 109
14109-32-1
Cd

Cattle
BOS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7403 Intestine, jejunum	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 3.6% b) 2.7%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7404 Kidney	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 19% b) 24%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7405 Liver	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 50% b) 51%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7406 Lung	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.31% b) 0.48%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7407 Milk	a) 1 b) 1 Ingestion	a) Not given b) Not given	a) 0.34 b) 0.33 ppm of dose/L	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Specific activity 3.3 mCi/mg. Mean concentrations from 5 d following single oral dose. Total secretion into milk for 5 d was 17.6 (direct) or 6.57 (maize) ppm of dose. Gamma spectrometry
7408 Muscle	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 4.86% b) 2.13%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Muscle=30% body wt. Gamma spectrometry
7409 Pancreas	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.16% b) 0.15%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry

(next page)

Cadmium, isotope of mass 109
14109-32-1
Cd

Cattle
BOS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7410 Rumen	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.32% b) 0.82%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7411 Skin	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 1.31% b) 2.99%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Skin=15% body wt. Gamma spectrometry
7412 Spleen	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.19% b) 0.16%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7413 Udder	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.47% b) 0.81%	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Distribution, in percentage of total body activity, measured at slaughter 131 d after single oral dose. Total retention was 0.13% of dose (a) or 0.025% of dose (b). Gamma spectrometry
7414 Urine	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 16+/-0.6 b) 35+/-1 ppm of dose	a) 28.4 mCi of [109-Cd]Cl2 in gelatin capsule b) 14.76 mCi on leaves of ZEA MAYS Total excretion over 10 d following single oral dose. Highest values observed d 2. Specific activity 33 mCi/mg. Gamma spectrometry

CATTLE; URINE; MILK; DELIBERATE EXPOSURE; KIDNEYS; LIVER; PANCREAS; SPLEEN; LUNGS; HEART; UDDER; MUSCLES; BONES; SKIN; RUMEN; ABOMASUM; DUODENUM; JEJUNUM; ILEUM; CECUM; COLON; TERRESTRIAL; CADMIUM; RADIOISOTOPES; RADIONUCLIDES

Van Bruwaene, R.; Gerber, G.B.; Kirchmann, R.; Colard, J. 1982 International Journal of Environmental Studies 19:47-51

Cadmium, isotope of mass 115

14336-68-6
Cd

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7415 Milk	a) 2 b) 2 Injection Ingestion	a) Not given b) Not given	a) 111+/-13 b) 2.77+/-0.43 S.E. ppm of dose/L	a) 0.04245 mCi of [115 m-Cd]C/2, IV b) 1.938-2.326 mCi in gelatin capsule, oral Specific activity 3.3 mCi/mg. Mean concentrations from 5 d period following single administration. Total secretion into milk for 5 d, in ppm of dose was 5300+/-610 S.E. (IV) or 93.1+/-17.6 S.E. (oral). Gamma spectrometry
CATTLE; URINE; MILK; DELIBERATE EXPOSURE; KIDNEYS; LIVER; PANCREAS; SPLEEN; LUNGS; HEART; UDDER; MUSCLES; BONES; SKIN; RUMEN; ABOMASUM; DUODENUM; JEJUNUM; ILEUM; CECUM; COLON; TERRESTRIAL; CADMIUM; RADIOISOTOPES; RADIONUCLIDES Van Bruwaene, R.; Gerber, G.B.; Kirchmann, R.; Colard, J. 1982 International Journal of Environmental Studies 19:47-51				

Calcium

7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
7416 Muscle	3	0.203-0.643 mg/kg Wet wt	0.386 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Bear
URSUS SPELEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7417 Bone	4	26.7-28.7 ug/g%	Not given	Pleistocene (20-50,000 yr BP) specimens. Humerus, femur and ulna, collected from caves, late 19th century. Significance of sampling techniques, fossilisation changes, burial site conditions and other geochemical and geographic factors is discussed. France ICP-AES
BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126				

Calcium

7440-70-2

Ca

AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Bluegill

LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7418 Muscle	2	0.206-0.259 mg/kg Wet wt	0.233 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1988 Environment International 9:361-362

Catfish

ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7419 Muscle	2	0.104-0.688 mg/kg Wet wt	0.396 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1988 Environment International 9:361-362

Cattle

BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7420 Blood, serum	607	<50->150 ppm	92.9+/-20.1 ppm	Mineral profile, 1981-1983. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Calcium
7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7421 Bone	9	24.5-28.6%	Not given	Femurs, tibiae and ulnae. Detection limit 1.0 ug/g. Absence probably due to use of calcium and phosphorus supplements in feed. France; Poland ICP-AES

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Tissue	Cases Exposure Route	Range	Mean	General Information
7422 Brain	a) 6 b) 6 c) 6 d) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 48.8 ug/g b) 91.5 ug/g c) 82 ug/g d) 79 ug/g Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis c) Same as a) except neutron aciviation analysis d) Same as a) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Tissue	Cases Exposure Route	Range	Mean	General Information
7423 Heart	a) 5 b) 10 c) 6 d) 9 e) 34 f) 68 Ingestion	a) Not given b) Not given c) 0.044-0.457 ug/g d) 0.025-0.142 ug/g e) Not given f) Not given Dry wt	a) 0.033 ug/g b) 0.046 ug/g c) Not given d) Not given e) 0.88 ug/g f) 0.26 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Calcium
7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7424 Kidney	90	44-225 ppm	62.3+/-29.8 mg/kg Wet wt	Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES
BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565				

Tissue	Cases Exposure Route	Range	Mean	General Information
7425 Kidney	a) 6 b) 6 c) 6 d) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 82.4 ug/g b) 77.2 ug/g c) 117 ug/g d) 100 ug/g Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis c) Same as a) except neutron aciviation analysis d) Same as a) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation; NA
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Tissue	Cases Exposure Route	Range	Mean	General Information
7426 Liver	229	<30->110 ppm	62.3+/-29.8 mg/kg Wet wt	Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES
BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565				

Calcium

7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7427 Liver	a) 6 b) 6 c) 6 d) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 50.8 ug/g b) 40.5 ug/g c) 57 ug/g d) 56 ug/g Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis c) Same as a) except neutron aciviation analysis d) Same as a) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation; NA
7428 Muscle	a) 6 b) 6 c) 6 d) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 50.6 ug/g b) 96.2 ug/g c) 70 ug/g d) 90 ug/g Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis c) Same as a) except neutron aciviation analysis d) Same as a) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation
7429 Spleen	a) 6 b) 6 c) 6 d) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 85.0 ug/g b) 56.0 ug/g c) 160 ug/g d) 80 ug/g Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis c) Same as a) except neutron aciviation analysis d) Same as a) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP, no Chelex separation

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Cattle (ancient)

Tissue	Cases Exposure Route	Range	Mean	General Information
7430 Bone	2	29.7-32.6 ug/g	31.2 ug/g	Pleistocene (20-50,000 yr BP) metacarpals, Bovidae family. Collected from caves. Significance of sampling techniques, fossilization changes, burial site conditions and other geochemical and geographic factors is discussed. Calculated mean. France; Poland ICP-AES

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Calcium
7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7431 Muscle	2	0.276-0.318 mg/kg Wet wt	0.297 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Dog
CANIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7432 Bone	2	31.8-32.2%	32.0%	Pleistocene (20-50,000 yr BP) specimens. Tibia and fibula, collected from cave, late 19th century. Significance of sampling techniques, fossilization changes, burial site conditions and other geochemical and geographic factors is discussed. Calculated mean. France ICP-AES
BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126				

Calcium

7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Dolphin, striped
STENELLA COERULEOALBA

Tissue	Cases Exposure Route	Range	Mean	General Information
7433 Bone	3	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable j) Not applicable k) Not applicable	a) 22.3% b) 13.0% c) 11.2% d) 13.1% e) 27.3% f) 24.5% g) 24.8% h) 28.2% i) 18.7% j) 18.5% k) 19.2% Wet wt	a) Female fetus, skull b) Dorsal vertebra c) Lumbar vertebra d) Caudal vertebra e) Mature male, dosal vertebra f) Lumbar vertebra g) Caudal vertebra h) Pregnant female, skull i) Dorsal vertebra j) Lumbar vertebra k) Caudal vertebra Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, repectively. Japan, Taiji, Kii Peninsula AAS
7434 Cartilage	3	a) Not applicable b) Not applicable c) Not applicable	a) 0.17% b) 0.12% c) 0.10% Wet wt	a) Female fetus b) Mature male c) Pregnant female Intervertebral discs. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS

ENVIRONMENTAL EXPOSURE; DOLPHINS; AQUATIC; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; CALCIUM; METALS; WATER POLLUTION; MUSCLES; BONES; ADIPOSE TISSUE; LIVER; SKIN; STOMACH; INTESTINES; PANCREAS; ADRENAL GLANDS; HEART; SPLEEN; BLOOD; LUNGS; KIDNEYS; DIAPHRAGM; BRAIN; OVARIES; TESTES; PLACENTA; VAGINA; AMNIOTIC FLUID; UMBILICAL CORD; MAMMARY GLANDS; UTERUS; AGE; FETUS; ADULTS; JAPAN

Honda, K.; Tatsukawa, R.; Fujiyama, T. 1982 Agricultural and Biological Chemistry 46(12):3011-3021

Earthworm
LUMBRICUS TERRESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7435 Body	a) 30 b) 10 c) 10 d) 10 e) 10 f) 12	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 7567+/-168 ug/g b) 7143+/-216 ug/g c) 7840+/-337 ug/g d) 7237+/-300 ug/g e) 7563+/-351 ug/g f) 7130+/-253 ug/g Dry wt	a) Site 1, pasture b) Site 2, pasture c) Site 3, woodland d) Site 4, woodland e) Site 5, lower pasture f) Site 6, lower pasture Park Mine sites, abandoned about 100 yr ago. Total in soil ranged from 369+/-1022 to 4460+/-682 ug/g, extractable from 377+/-64 to 2854+/-379 ug/g. Wales, S., Llanbrisant AAS

ENVIRONMENTAL EXPOSURE; LEAD; CALCIUM; LEAD; BODY; EARTHWORMS; SOILS; LAND POLLUTION; MINING; WALES; BIOACCUMULATION; BIOLOGICAL MONITORING; TERRESTRIAL

Morris, B.; Morgan, A.J. 1986 Bulletin of Environmental Contamination and Toxicology 37:266-238

Calcium

7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Eel, American
ANGUILLA ROSTRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7436 Muscle	2	0.414-0.473 mg/kg Wet wt	0.444 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7437 Bone	2	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable j) Not applicable	a) 0.4 mg/g b) 48.1 mg/g c) 71.0 mg/g d) 67.4 mg/g e) 66.4 mg/g f) 109 mg/g g) 163 mg/g h) 123 mg/g i) 85.2 mg/g j) 112 mg/g Wet wt	a) Chick, sternum b) Humerus c) Cervica vertebrae d) Femur e) Tibia f) Adult, sternum g) Humerus h) Cervical vertebrae i) Femur j) Tibia Chick was 12 d old female, adult was a 2 yr old male. Both captured in 1981. Korea, Chungcheongnando, Cheonan City AAS

BIRDS; ENVIRONMENTAL EXPOSURE; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; MERCURY; MUSCLES; BONES; FEATHERS; BIOACCUMULATION; KOREA; TERRESTRIAL

Honda, K.; Min, B.Y.; Tatsukawa, R. 1985 Bulletin of Environmental Contamination and Toxicology 35:781-789

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7438 Bone	3	33.1-33.8%	Not given	Pleistocene (20-50,000 yr BP) specimens. Femur and two humeri, collected from caves, late 19th century. Significance of sampling techniques, fossilization changes, burial site conditions and other geochemical and geographic factors is discussed. France ICP-AES

BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS

Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126

Calcium

7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Lion
PANTHERA LEO

Tissue	Cases Exposure Route	Range	Mean	General Information
7439 Bone	1	Not applicable	33.3%	Pleistocene (20,000-50,000 yr BP) metacarpal. Collected from cave, late 19th century. Significance of sampling techniques, fossilization changes, burial site conditional and other geochemical and geographic factors is discussed. France ICP-AES
BONES; FRANCE; POLAND; TERRESTRIAL; BEARS; HORSES; LIONS; DOGS; CATTLE; COMPARATIVE EVALUATIONS; CADMIUM; LEAD; ZINC; BARIUM; MAGNESIUM; CALCIUM; MINERALS Jaworowski, Z.; Barbalat, F.; Blain, C.; Evelyn Peyre 1985 Science of the Total Environment 43:103-126				

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7440 Blood, serum	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 10+/-0.4 mg/dl b) 10+/-0.4 mg/dl c) 10+/-0.4 mg/dl d) 10+/-0.2 mg/dl e) 9+/-0.2 mg/dl f) 11+/-0.2 mg/dl g) 10+/-0.5 mg/dl h) 9+/-0.5 mg/dl i) 11+/-0.5 mg/dl S.E.	a) 3 d after lambing, complete pelleted basal diet, 5 cases b) Diet fortified with CSM (35% cottonseed meal), 5 cases c) Diet fortified with SS (7% dried sewage solids), 5 cases d) 42 d after lambing, basal diet e) With CSM f) With SS g) At slaughter, 40 d after weaning, basal diet h) With CSM i) With SS Fine-wool ewes, fed given diets for 2 yr. SS are gamma-irradiated primary municipal sewage solids from Las Cruces, NM. AAS
7441 Blood, whole	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 35+/-11 ug/ml b) 54+/-11 ug/ml c) 56+/-11 ug/ml d) 54+/-2 ug/ml e) 46+/-2 ug/ml f) 54+/-2 ug/ml g) 55+/-3 ug/ml h) 44+/-3 ug/ml i) 43+/-3 ug/ml S.E.	a) 3 d after lambing, complete pelleted basal diet, 5 cases b) Diet fortified with CSM (3.5% cottonseed meal), 5 cases c) Diet fortified with SS (7% dried sewage solids), 5 cases d) 42 d after lambing, basal diet e) With CSM f) With SS g) At slaughter, 40 d after weaning, basal diet h) With CSM i) With SS Fine-wool ewes, fed given diets for 2 yr. SS are gamma-irradiated primary municipal sewage solids from Las Cruces, NM. AAS

(next page)

Calcium
7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Sheep
OVIS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7442 Bone	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 90+/-12 ug/g b) 84+/-12 ug/g c) 100+/-12 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7443 Kidney	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 283+/-48 ug/g b) 213+/-48 ug/g c) 222+/-48 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7444 Liver	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 126+/-16 ug/g b) 121+/-16 ug/g c) 154+/-16 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7445 Milk	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 3,259+/-72 ug/ml b) 3,352+/-72 ug/ml c) 3,519+/-72 ug/ml d) 3,844+/-76 ug/ml e) 3,563+/-76 ug/ml f) 3,612+/-76 ug/ml S.E.	a) 3 d after lambing, complete pelleted basal diet, 5 cases b) Diet fortified with CSM (3.5% cottonseed meal), 5 cases c) Diet fortified with SS (7% dried sewage solids), 5 cases d) 42 d after lambing, basal diet e) With CSM f) With SS Fine-wool ewes, fed given diets for 2 yr. SS are gamma-irradiated primary municipal sewage solids from Las Cruces, NM. AAS
7446 Muscle	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 109+/-16 ug/g b) 103+/-16 ug/g c) 163+/-16 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7447 Spleen	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 134+/-20 ug/g b) 171+/-20 ug/g c) 263+/-20 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE

Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424

Calcium

7440-70-2

Ca

AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Sponge

SPIRASTRELLA CUSPIDIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7448 Body		0.012-0.20% Dry wt	0.064% Dry wt	Collected during 1978-80. Levels higher during post-monsoon (Oct-Jan). Little inter- and intra-specific variations. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Sponge (P. foetida)

PROSTYLYSSA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7449 Body		0.045-0.85% Dry wt	0.29% Dry wt	Collected during 1978-80. Levels higher during post-monsoon (Oct-Jan). Little inter- and intra-specific variations. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Sunfish, redbreast

LEPOMIS AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7450 Muscle	2	0.388-0.530 mg/kg Wet wt	0.459 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Calcium
7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7451 Muscle	2	0.192-0.240 mg/kg Wet wt	0.216 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Carbamic acid, (3-(dimethylamino)propyl)-, propyl ester
24579-73-5
C9-H20-N2-O2

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7452 Adipose	3 Injection	Not given	0.11+/-0.04 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7453 Bile	3 Injection	Not given	12.74+/-3.07 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7454 Brain	3 Injection	Not given	0.17+/-0.02 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7455 Eye	3 Injection	Not given	1.03+/-0.28 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7456 Gastrointestinal tract	3 Injection	a) Not given b) Not given c) Not given	a) 2.00+/-1.00 mg/kg b) 1.77+/-0.60 mg/kg c) 1.19+/-0.30 mg/kg	a) Ppylorie caeca b) Intestine c) Stomach Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting

(next page)

Carbamic acid, (3-(dimethylamino)propyl)-, propyl ester
24579-73-5
C9-H20-N2-O2

Bluegill
LEPOMIS MACROCHIRUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7457 Gills	3 Injection	Not given	0.74+/-0.13 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7458 Gonads	3 Injection	Not given	0.62+/-0.21 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7459 Heart	3 Injection	Not given	1.22+/-0.28 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7460 Kidney	3 Injection	Not given	2.88+/-0.81 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7461 Liver	3 Injection	Not given	2.04+/-0.30 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7462 Muscle	3 Injection	Not given	0.39+/-0.07 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7463 Spleen	3 Injection	Not given	1.01+/-0.22 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.95 uCi each (dose=2.25+/-0.19 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
DELIBERATE EXPOSURE; INJECTION; AQUATIC; FISHES; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BILE; KIDNEYS; LIVER; CECUM; INTESTINES; HEART; STOMACH; EYE; SPLEEN; GILLS; GONADS; MUSCLES; BRAIN; ADIPOSE TISSUE; GASTROINTESTINAL SYSTEM Gray, C.; Knowles, C.O. 1981 Chemosphere 10(5):469-476				

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7464 Adipose	3 Injection	Not given	0.06+/-0.04 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting

(next page)

Carbamic acid, (3-(dimethylamino)propyl)-, propyl ester
24579-73-5
C9-H20-N2-O2
Catfish, channel
ICTALURUS PUNCTATUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7465 Bile	3 Injection	Not given	3.68+/-0.88 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7466 Brain	3 Injection	Not given	0.21+/-0.05 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7467 Eye	Injection	Not given	3.10+/-1.06 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7468 Gastrointestinal tract	3 Injection	a) Not given b) Not given	a) 1.45+/-0.35 mg/kg b) 0.72+/-0.14 m/gkg	a) Intestine b) Stomach Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7469 Gills	3 Injection	Not given	0.54+/-0.11 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7470 Heart	Injection	Not given	0.44+/-0.06 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7471 Kidney	3 Injection	Not given	2.17+/-0.54 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7472 Liver	3 Injection	Not given	1.04+/-0.20 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
7473 Muscle	3 Injection	Not given	0.55+/-0.11 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting

(next page)

Carbamic acid, (3-(dimethylamino)propyl)-, propyl ester
24579-73-5
C9-H20-N2-O2
Catfish, channel
ICTALURUS PUNCTATUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7474 Spleen	Injection	Not given	1.08+/-0.24 mg/kg	Propamocarb-[14-C] equivalents 24 hr after i.p. injection with 2.68 uCi each (dose=1.73+/-0.14 mg/kg). Specific activity was 12.18 mCi/mmol. Also included data for fillet and offal at 6 and 24 hr. Scintillation counting
DELIBERATE EXPOSURE; INJECTION; AQUATIC; FISHES; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; BILE; KIDNEYS; LIVER; CECUM; INTESTINES; HEART; STOMACH; EYE; SPLEEN; GILLS; GONADS; MUSCLES; BRAIN; ADIPOSE TISSUE; GASTROINTESTINAL SYSTEM Gray, C.; Knowles, C.O. 1981 Chemosphere 10(5):469-478				

Carbamic acid, methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester (8 CI); 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate (9 CI)
1563-66-2
C12-H15-N-O3
MW 221.3, MP 105-152 C, VP 2X10(E-5) mm Hg at 33 C
Earthworm
LUMBRICUS TERRESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7475 Body				Review discusses vital role of earthworms in the environment and their usefulness as test organisms, and it summarizes chemical toxicity data from field and laboratory investigations.
EARTHWORMS; TERRESTRIAL; REVIEW; BIOACCUMULATION; PESTICIDE RESIDUES; INSECTICIDES; BIOINDICATORS; LEAD; ZINC; DDT; METABOLITES; METABOLISM; DELIBERATE EXPOSURE Roberts, B.L.; Dorough, H.W. 1985 Environmental Toxicology and Chemistry 4:307-323				

Earthworm (E. foetida)
EISENIA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7476 Body				Review discusses vital role of earthworms in the environment and their usefulness as test organisms, and it summarizes chemical toxicity data from field and laboratory investigations.
EARTHWORMS; TERRESTRIAL; REVIEW; BIOACCUMULATION; PESTICIDE RESIDUES; INSECTICIDES; BIOINDICATORS; LEAD; ZINC; DDT; METABOLITES; METABOLISM; DELIBERATE EXPOSURE Roberts, B.L.; Dorough, H.W. 1985 Environmental Toxicology and Chemistry 4:307-323				

Carbamic acid, methyl-, 4-(dimethylamino)-m-tolyl ester (8 CI); Phenol, 4-(dimethylamino)-3-methyl-, methylcarbamate (ester) (9 CI)
2032-59-9
C11-H16-N2-O2
MW 208, MP 93-94 C

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
7477 Body		a) Not detected-17.1+/-6.1 ppb b) Not detected-31.6+/-6.7 ppb c) Not detected-127.0+/-8.8 ppb Wet wt	a) Not given b) Not given c) Not given	a) Prespray and 0.5 hr, 100 m downstream from application site of oil-based Matacil 180D. Declined to trace level (<3.0 ppb wet wt) at 1.5 hr b) Prespray and 2.0 hr, 100 m, oil-based Matacil 180F. <3.0 ppb wet wt at 3.0 hr c) Prespray and 3.0 hr, 150 m, water-based Matacil 180 F. <3.0 ppb wet wt at 6.0 hr Ranges of means, 14-15 mo old hatchery-reared fingerlings in cages, 4/time point. Spraying done at 3 different sites at 1 wk intervals. Actual active ingredient 8.99 g in a), 7.19 g in b), 9.59 g in c). None detected at control site. Limits of detection 0.05 ppb in water, 1.5 ppb in tissues. Residues also compared in water and sediments. Canada, Ontario, Matt Brook (headwater stream of Goulais River) north of Searchmont. 7/81. GLC
BODY; FISHES; AQUATIC; DELIBERATE EXPOSURE; CANADA; COMPARATIVE EVALUATIONS; INSECTICIDES; PESTICIDE RESIDUES; WATER POLLUTION Sundaram, K.M.S.; Szeto, S. 1985 Journal of Environmental Science and Health B20(2):187-200				

Tissue	Cases Exposure Route	Range	Mean	General Information
7478 Body, whole	a) 4 b) 4 c) 4 d) 4 e) 3 f) 2	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 6.47+/-0.60 ppm b) 10.2+/-1.15 ppm c) 14.6+/-1.44 ppm d) 22.7+/-1.88 ppm e) 38.6+/-7.17 ppm f) 40.0+/-0.85 ppm	a) After 96-hr exposure to 3.9 ppm aldicarb b) 6.0 ppm c) 9.0 ppm d) 12.9 ppm e) 18.9 ppm f) 27.9 ppm Solution used for making above levels contained 33.3% Matacil 1.8 F and 1.25% Atlox 3409 F (emulsifier). %'s of total residue were 65.8, 51.6, 74.9, 77.5, 78.3, 84.6, respectively. Not detectable in other groups after 96 hr recovery period in fresh water. 10 mo old fingerlings, mean wt 5.4 g. Canada, Ontario GLC
DELIBERATE EXPOSURE; PESTICIDES; PESTICIDE RESIDUES; METABOLITES; FISHES; AQUATIC; BODY; WATER POLLUTION; CANADA; JUVENILES Szeto, S.; Holmes, S.B. 1982 Journal of Environmental Science and Health B17(1):51-61				

Carbamic acid, methyl-, 4-(methylamino)-m-tolyl ester (8 CI); Phenol, 3-methyl-4-(methylamino)-, methylcarbamate (ester) (9 CI)
10233-96-2
C10-H14-N2-O2
Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
7479 Body, whole	a) 4 b) 4 c) 4 d) 4 e) 3 f) 2	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 3.37+/-0.33 ppm b) 9.70+/-1.68 ppm c) 4.89+/-1.05 ppm d) 6.56+/-0.62 ppm e) 10.7+/-3.07 ppm f) 7.33+/-2.00 ppm	a) After 96-hr exposure to 3.9 ppm aldicarb b) 6.0 ppm c) 9.0 ppm d) 12.9 ppm e) 18.9 ppm f) 27.9 ppm Solution used for making above levels contained 33.3% Matacil 1.8 F and 1.25% Atlox 3409 F (emulsifier). Metabolite of Aminocarb. %'s of total residue were 34.2, 48.7, 25.1, 22.5, 21.7, 15.4, respectively. Not detectable in other groups after 96 hr recovery period in fresh water. 10 mo old fingerlings, mean wt 5.4 g. Canada, Ontario GLC
DELIBERATE EXPOSURE; PESTICIDES; PESTICIDE RESIDUES; METABOLITES; FISHES; AQUATIC; BODY; WATER POLLUTION; CANADA; JUVENILES Szeto, S.; Holmes, S.B. 1982 Journal of Environmental Science and Health B17(1):51-61				

Carbon tetrachloride (8 CI); Methane, tetrachloro- (9 CI)
56-23-5
C-Cl4
MW 153.84, MP -22.6 C, BP 76.8 C, VP 100 mm Hg at 23.0 C
Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7480 Body		Not given	3.9 ppb Wet wt	The Rigolets, navigable channel into Lake Pontchartrain, specimens collected May-June, 1980. Composite samples. Louisiana GC/MS
BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255				

Carbon tetrachloride (8 CI); Methane, tetrachloro- (9 CI)

56-23-5
C-Cl4
MW 153.84, MP -22.6 C, BP 76.8 C, VP 100 mm Hg at 23.0 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7481 Body		Not given	1.3 ppb Wet wt	Collected in May-June, 1980, from mouth of Inner Harbor Navigational Canal leading to Lake Pontchartrain. 5 samples. Louisiana GC/MS
BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255				

Catechol, 3,4-dichloro- (No postings in CHEMLINE).

Blackfly
SIMULIUM sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7482 Body, whole	3	Not given	20 ng/g Wet wt	Collected at Lake Vatia in 1983. Estimated from graph. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Eagle, white-tailed
HALIAEETUS ALBICILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7483 Brain	1	Not applicable	0 ng/g Wet wt	Collected in 1980-1982. Limit of detection 1 ppb. Finland GC-EC
7484 Eggs	4	Not applicable	0 ng/g Wet wt	Collected in 1980-1982. Limit of detection 1 ppb. Finland GC-EC
7485 Kidney	1	Not applicable	0 ng/g Wet wt	Collected in 1980-1982. Limit of detection 1 ppb. Finland GC-EC

(next page)

Catechol, 3,4-dichloro- (No postings in CHEMLINE).

Eagle, white-tailed
HALIAEETUS ALBICILLA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7486 Liver	1	Not applicable	130 ng/g Wet wt	Collected in 1981-1982. Finland GC-EC
7487 Muscle	4	Not applicable	0 ng/g Wet wt	Collected in 1980-1982. Limit of detection 1 ppb. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Midge
CHIRONOMUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7488 Body, whole	10	Not given	10 ng/g Wet wt	Collected at Lake Vatia in 1983. Estimated from graph. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Osprey
PANDION HALIAETUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7489 Eggs	7	Not applicable	0 ng/g Wet wt	Collected in 1980-1982. Limit of detection 1 ppb. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Catechol, 3,4-dichloro- (No postings in CHEMLINE).

Salmon, Baltic
SALMO SALAR

Tissue	Cases Exposure Route	Range	Mean	General Information
7490 Eggs	a) 15 b) 3 c) 10	a) Not given b) Not given c) Not given	a) 26.8+/-47.7 ppb b) 0.0 ppb c) 17.6+/-25.5 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg egg fat 5.13-5.68%. Detection limit 4 ppb. Finland, Baltic Sea GC
7491 Liver	a) 15 b) 3 c) 10	a) Not given b) Not given c) Not given	a) 247.7+/-202.2 ppb b) 118.7+/-121.6 ppb c) 210.9+/-128.8 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg liver fat 2.06-2.37%. Finland, Baltic Sea GC

FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES

Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740

Tissue	Cases Exposure Route	Range	Mean	General Information
7492 Muscle	a) 13 b) 3 c) 10 d) 11	a) Not given b) Not given c) Not given d) Not given	a) 19.2+/-50.6 ng/g b) 0.0+/-0.0 ng/g c) 332+/-331 ng/g d) 89.9+/-185 ng/g Wet wt	a) Kemi River, SALAR b) Kymi River, SALAR c) Hatchery, SALAR d) Kemi River, TRUTTA Site and variety collected in 1983. Finland GC-EC

BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE

Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491

Catechol, 3,4-dichloro- (No postings in CHEMLINE).

Salmon, Baltic
SALMO SALAR

Tissue	Cases Exposure Route	Range	Mean	General Information
7493 Muscle	a) 18 b) 3 c) 10	a) Not given b) Not given c) Not given	a) 19.2+/-50.6 ppb b) 0.0 ppb c) 332.0+/-330.9 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg muscle fat 4.02-5.43%. Detection limit 4 ppb. Finland, Baltic Sea GC
FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740				

Sponge
SPONGILLA LAGUSTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7494 Body, whole	3	Not given	100 ng/g Wet wt	Collected at Lake Vatia in 1983. Estimated from graph. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Starling
STURNUS VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7495 Muscle	45	0-23 ng/g Wet wt	0.822+/-3.74 ng/g Wet wt	Juveniles collected from nests, immediately prior to flight, in South Finland 1982-1983. Finland GC-EC
BODY; MUSCLES; EGGS; BRAIN; LIVER; KIDNEYS; FISHES; AQUATIC; BIRDS; TERRESTRIAL; FINLAND; JUVENILES; ADULTS; PENTACHLOROPHENOL; POLYCHLORINATED PHENOLS; PHENOLS; CATECHOLS; BIOACCUMULATION; WATER POLLUTION; ENVIRONMENTAL EXPOSURE Paasivirta, J.; Heinola, K.; Humppi, T.; Karjalainen, A.; Knuutinen, J.; Mantykoski, K.; Paukku, R.; Piilola, T.; Surma-Aho, K.; Tarhanen, J.; Welling, L.; Vihonen, H.; Sarkka, J. 1985 Chemosphere 14(5):469-491				

Catechol, 3,4-dichloro- (No postings in CHEMLINE).

Starling
STURNUS VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7496 Muscle	a) 21 b) 24	a) Not given b) Not given	a) 1.76+/-5.38 ppb b) 0.000 ppb Wet wt	a) 1982 b) 1983 Years collected from nests, immediately prior to flight. Detection limit 4 ppb. Finland GC-EC
MUSCLES; ADIPOSE TISSUE; BIRDS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FINLAND; JUVENILES; CHLORINATED HYDROCARBONS; DDD; DDE; DDT; HEXACHLOROBENZENE; MERCURY; LINDANE; OXYCHLORDANE; BIOACCUMULATION; PESTICIDES; PESTICIDE RESIDUES Paasivirta, J.; Paukku, R.; Surma-Aho, K.; Welling, L. 1985 Chemosphere 14(5):457-468				

Trout, Bothnian Bay
SALMO TRUTTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7497 Eggs	11	Not given	32.9+/-108.8 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg egg fat 2.72%. Finland GC
7498 Liver	11	Not given	319.5+/-377.4 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg liver fat 2.72%. Finland GC
7499 Muscle	11	Not given	89.9+/-185.0 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg muscle fat 3.15%. Finland GC
FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740				

Cesium
7440-46-2
Cs
AtW 132.9054, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 378 C

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
7500 Bone	3	0.001-0.002 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

(next page)

Cesium
7440-46-2
Cs
AtW 132.9054, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 873 C

Bass, largemouth
MICROPTERUS SALMOIDES

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7501 Fin	3	0.002-0.003 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7502 Muscle	3	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24				

Tissue	Cases Exposure Route	Range	Mean	General Information
7503 Muscle	3	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7504 Bone	4	0.001-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7505 Fin	4	0.002-0.003 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

(next page)

Cesium
7440-46-2
Cs
AtW 132.9054, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Bluegill
LEPOMIS MACROCHIRUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7506 Muscle	4	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24				

Tissue	Cases Exposure Route	Range	Mean	General Information
7507 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Catfish
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7508 Bone	2	0.001-0.002 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7509 Fin	2	0.001-0.003 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7510 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24				

Cesium

7440-46-2
Cs
AtW 132.9054, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Catfish
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7511 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7512 Bone	2	0.002-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7513 Fin	2	0.003-0.004 mg/kg Wet wt	0.003 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7514 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS
Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24

Tissue	Cases Exposure Route	Range	Mean	General Information
7515 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Cesium
7440-46-2
Cs
AtW 132.9054, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Eel, American
ANGUILLA ROSTRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7516 Bone	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7517 Fin	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS
Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24

Tissue	Cases Exposure Route	Range	Mean	General Information
7518 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Tissue	Cases Exposure Route	Range	Mean	General Information
7519 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS
Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24

Sunfish, redbreast
LEPOMIS AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7520 Bone	2	0.001-0.002 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

(next page)

Cesium
7440-46-2
Cs
AtW 132.9054, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Sunfish, redbreast
LEPOMIS AURITUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7521 Fin	2	0.001-0.002 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7522 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24				

Tissue	Cases Exposure Route	Range	Mean	General Information
7523 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7524 Bone	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7525 Fin	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
7526 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1983 from Savannah River near Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
BONES; MUSCLES; FINS; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; METALS; CESIUM; BIOACCUMULATION; POWER PLANTS Koli, A.K.; Whitmore, R.; Roache, W. 1985 Environment International 11:23-24				

Cesium
7440-46-2
Cs
AtW 132.9054, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7527 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Cesium, isotope of mass 134
13967-70-9
Cs
MP 28.5 C, BP 705 C

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
7528 Body	21 samples	Not given	3.5 Bq/kg Wet wt	From commercial sources. Caught in fishing grounds off East Irish coast. Each sample measured consisted of 2-8 fish, or 1-3 kg wet fish. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry

BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION
McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337

Herring
CLUPEA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7529 Body	3 samples	Not given	3.0 Bq/kg Wet wt	Samples from commercial fishing grounds off East Irish coast. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry

BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION
McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337

Cesium, isotope of mass 134
13967-70-9
Cs
MP 28.5 C, BP 705 C

Plaice
PLEURONECTES PLATESSA

Tissue	Cases Exposure Route	Range	Mean	General Information
7530 Body	14 samples	Not given	1.3 Bq/kg Wet wt	From commercial sources. Caught in fishing grounds off East Irish coast. Each sample measured consisted of 2-8 fish, or 1-3 kg wet fish. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry

BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION
McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337

Prawn

Tissue	Cases Exposure Route	Range	Mean	General Information
7531 Body	6 samples	Not given	1.4 Bq/kg Wet wt	Samples from commercial fishing grounds off East Irish coast. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry

BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION
McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337

Whiting
MERLANGIUS MERLANGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7532 Body	16 samples	Not given	4.6 Bq/kg Wet wt	From commercial sources. Caught in fishing grounds off East Irish coast. Each sample measured consisted of 2-8 fish, or 1-3 kg wet fish. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry

BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION
McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337

Cesium, isotope of mass 137
10045-97-3
Cs
AtW 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Boar
SUS SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
7533 Bone	6	a) Not given b) Not given	a) 5 pCi/g b) 4 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
7534 Gonads	6	a) Not given b) Not given	a) 65 pCi/g b) 24 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
7535 Heart	6	a) Not given b) Not given	a) 68 pCi/g b) 40 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
7536 Kidney	6	a) Not given b) Not given	a) 97 pCi/g b) 42 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
7537 Liver	6	a) Not given b) Not given	a) 26 pCi/g b) 15 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
7538 Lung	6	a) Not given b) Not given	a) 35 pCi/g b) 20 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
7539 Muscle	6	a) Not given b) Not given	a) 111 pCi/g b) 38 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
7540 Skin	6	a) Not given b) Not given	a) pCi/g b) 5 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting

(next page)

Cesium, isotope of mass 137
10045-97-3
Cs
AtW 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Boar
SUS SCROFA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7541 Spleen	6	a) Not given b) Not given	a) 48 pCi/g b) 25 pCi/g Dry wt	a) Summer b) Winter Feral hogs collected summer and winter 1976-78. Estimated from graph. South Carolina, Aiken, Savannah River Plant Scintillation counting
SWINE; ENVIRONMENTAL EXPOSURE; RADIOISOTOPES; SOUTH CAROLINA; MUSCLES; KIDNEYS; LUNGS; HEART; GONADS; SPLEEN; BRAIN; LIVER; SKIN; BONES; ADULTS; CESIUM; ANIMAL POPULATIONS Stribling, H.L.; Brisbin, I.L.; Sweeney, J.R. 1986 Health Physics 50(6):852-854				

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7542 Kidney	a) 4 b) 9	a) 26-36 pCi/kg b) 16-31 pCi/kg Wet wt	a) 33.5 pCi/kg b) <29 pCi/kg Medians Wet wt	a) Sampled 5/81, 0.25-7.0 yr olds, 90-570 kg b) 10/81, 0.5-14.0 yr olds, 146-532 kg Nevada, Nevada Test Site Gamma spectrom, high resolution
7543 Liver	a) 4 b) 10 c) 1	a) 22-<30 pCi/kg b) <25-<28 pCi/kg c) Not applicable Wet wt	a) <27 pCi/kg b) <25 pCi/kg c) 50+/-12.0 pCi/kg Medians Wet wt	a) Sampled 5/81, 0.25-7.0 yr olds, 90-570 kg b) 10/81, 0.5-14.0 yr olds, 146-532 kg c) 5/81 fetus Nevada, Nevada Test Site Gamma spectrom, high resolution
7544 Lung	a) 4 b) 1	a) <45-690 pCi/kg b) Not applicable Wet wt	a) <56 pCi/kg b) <25 pCi/kg Medians Wet wt	a) Sampled 5/81, 0.25-7.0 yr olds, 90-570 kg b) 5/81, fetus Nevada, Nevada Test Site Gamma spectrom, high resolution
7545 Muscle	a) 4 b) 8 c) 1	a) 35-65 pCi/kg b) 15-55 pCi/kg c) Not applicable Wet wt	a) 46 pCi/kg b) 28 pCi/kg c) 36.0+/-9.9 pCi/kg Wet wt	a) Sampled 5/81, 0.25-7.0 yr olds, 90-570 kg b) 10/81, 0.5-14.0 yr olds, 146-532 kg c) 5/81, fetus Nevada, Nevada Test Site Gamma spectrom, high resolution
CATTLE; DEER; SHEEP; HORSES; BIRDS; GOATS; MUSCLES; LIVER; LUNGS; LYMPH NODES; GONADS; FEMUR; THYROID GLANDS; KIDNEYS; BLOOD; BONES; VISCERA; ENVIRONMENTAL EXPOSURE; NEVADA; STRONTIUM; PLUTONIUM; POTASSIUM; CESIUM; RADIONUCLIDES; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; TERRESTRIAL Smith, D.D.; Giles, K.R. 1982 DOE/DP/00539-047, DE83 014397. Annual Report, 1981. 64pp				

Cesium, isotope of mass 137
10045-97-3
Cs
AtW 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Chukar
ALECTORIS CHUKAR

Tissue	Cases Exposure Route	Range	Mean	General Information
7546 Muscle	1	Not applicable	48.0+/-17.0 pCi/kg Wet wt	Collected 12/18/81 Mature bird, 0.7 kg Nevada, Nevada Test Site Gamma spectrom, high resolution
7547 Viscera	1	Not applicable	<73 pCi/kg Wet wt	Collected 12/18/81 Mature bird, 0.7 kg Nevada, Nevada Test Site Gamma spectrom, high resolution
CATTLE; DEER; SHEEP; HORSES; BIRDS; GOATS; MUSCLES; LIVER; LUNGS; LYMPH NODES; GONADS; FEMUR; THYROID GLANDS; KIDNEYS; BLOOD; BONES; VISCERA; ENVIRONMENTAL EXPOSURE; NEVADA; STRONTIUM; PLUTONIUM; POTASSIUM; CESIUM; RADIONUCLIDES; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; TERRESTRIAL Smith, D.D.; Giles, K.R. 1982 DOE/DP/00539-047, DE83 014397. Annual Report, 1981. 64pp				

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
7548 Body	21 samples	Not given	75 Bq/kg Wet wt	From commercial sources. Caught in fishing grounds off East Irish coast. Each sample measured consisted of 2-8 fish, or 1-3 kg wet fish. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry
BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337				

Deer, mule
ODOCOILEUS HEMIONUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7549 Kidney	4	22.0-110.0 pCi/kg Wet wt	<73 pCi/kg Median Wet wt	Collected 3/11-10/28/81 1.0-1.5 yr olds, 30-50 kg Nevada, Nevada Test Site Gamma spectrom, high resolution

(next page)

Cesium, isotope of mass 137
10045-97-3
Cs
AtW 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Deer, mule
ODOCOILEUS HEMIONUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7550 Liver	4	<25-<29 pCi/kg Wet wt	<265 pCi/kg [sic] Median Wet wt	Collected 3/11-10/28/81 1.0-1.5 yr olds, 30-50 kg Nevada, Nevada Test Site Gamma spectrom, high resolution
7551 Muscle	4	23.0-28.0 pCi/kg Wet wt	<265 pCi/kg [sic] Median Wet wt	Collected 3/11-10/28/81 1.0-1.5 yr olds, 30-50 kg Nevada, Nevada Test Site Gamma spectrom, high resolution
CATTLE; DEER; SHEEP; HORSES; BIRDS; GOATS; MUSCLES; LIVER; LUNGS; LYMPH NODES; GONADS; FEMUR; THYROID GLANDS; KIDNEYS; BLOOD; BONES; VISCERA; ENVIRONMENTAL EXPOSURE; NEVADA; STRONTIUM; PLUTONIUM; POTASSIUM; CESIUM; RADIONUCLIDES; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; TERRESTRIAL Smith, D.D.; Giles, K.R. 1982 DOE/DP/00539-047, DE83 014397. Annual Report, 1981. 64pp				

Herring
CLUPEA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7552 Body	3 samples	Not given	86 Bq/kg Wet wt	Samples from commercial fishing grounds off East Irish coast. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry
BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337				

Cesium, isotope of mass 137
10045-97-3
Cs
AtW 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Horse
EQUUS CABALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7553 Muscle	1	Not applicable	38.0+/-12.0 pCi/kg Wet wt	Hit by bus 5/14/81 Approx 15-18 yr old, 550 kg Nevada, Nevada Test Site Gamma spectrom, high resolution
CATTLE; DEER; SHEEP; HORSES; BIRDS; GOATS; MUSCLES; LIVER; LUNGS; LYMPH NODES; GONADS; FEMUR; THYROID GLANDS; KIDNEYS; BLOOD; BONES; VISCERA; ENVIRONMENTAL EXPOSURE; NEVADA; STRONTIUM; PLUTONIUM; POTASSIUM; CESIUM; RADIONUCLIDES; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; TERRESTRIAL Smith, D.D.; Giles, K.R. 1982 DOE/DP/00539-047, DE83 014397. Annual Report, 1981. 64pp				

Plaice
PLEURONECTES PLATESSA

Tissue	Cases Exposure Route	Range	Mean	General Information
7554 Body	14 samples	Not given	35 Bq/kg Wet wt	From commercial sources. Caught in fishing grounds off East Irish coast. Each sample measured consisted of 2-8 fish, or 1-3 kg wet fish. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry
BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337				

Prawn

Tissue	Cases Exposure Route	Range	Mean	General Information
7555 Body	6 samples	Not given	33 Bq/kg Wet wt	Samples from commercial fishing grounds off East Irish coast. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry
BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337				

Cesium, isotope of mass 137
10045-97-3
Cs
AtW 137, MP 28.5 C, BP 705 C, VP 1 mm Hg at 279 C, 10 mm Hg at 373 C

Sheep, desert bighorn
OVIS CANADENSIS NELSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
7556 Kidney	17	<29-130 pCi/kg Wet wt	<65.5 pCi/kg Median Wet wt	Killed by hunters 11/15-12/20/81 Approx age 5-11 yr. Nevada, Clark, Esmeralda, and Lincoln Counties. Gamma spectrom, high resolution
CATTLE; DEER; SHEEP; HORSES; BIRDS; GOATS; MUSCLES; LIVER; LUNGS; LYMPH NODES; GONADS; FEMUR; THYROID GLANDS; KIDNEYS; BLOOD; BONES; VISCERA; ENVIRONMENTAL EXPOSURE; NEVADA; STRONTIUM; PLUTONIUM; POTASSIUM; CESIUM; RADIONUCLIDES; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; TERRESTRIAL Smith, D.D.; Giles, K.R. 1982 DOE/DP/00539-047, DE83 014397. Annual Report, 1981. 64pp				

Whiting
MERLANGIUS MERLANGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7557 Body	16 samples	Not given	97 Bq/kg Wet wt	From commercial sources. Caught in fishing grounds off East Irish coast. Each sample measured consisted of 2-8 fish, or 1-3 kg wet fish. Estimated population dose to Irish public from consumption is approximately 2 man-Sv/yr and the possible dose to a member of the critical group is 1.4% of the limit recommended by ICRP. Irish Sea Gamma spectrometry
BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; IRISH SEA; METAL POISONING; METALS; CESIUM; BIOACCUMULATION; FOOD CONTAMINATION; HEALTH HAZARDS; POPULATION EXPOSURE; RADIATION DOSES; RADIOISOTOPES; WATER POLLUTION McAulay, I.R.; Doyle, C. 1985 Health Physics 48(3):333-337				

Chlorinated paraffins
63449-39-8
EXACT COMPOSITION UNKNONWN OR UNDETERMINED
Bleak
ALBURNUS ALBURNUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7558 Body, whole	a) 15 b) 15 c) 15 d) 15 e) 15 f) 15 Ingestion	a) 4-24 ug/g b) 10-118 ug/g c) 17-84.5 ug/g Wet wt	a) Not given b) Not given c) Not given	a) Witaclor 549, carbon chain length 18-26, dose 3400 ug/g food b) Witaclor 149, C10-13, dose 2500 ug/g c) Witaclor 171P, C110-13, dose 3180 ug/g d) Witaclor 149, low dose, 590 ug/g e) Medium dose, 2500 ug/g f) High dose, 5800 ug/g Levels at 14 and 91 d (end) of exposure during accumulation period. All except c) almost back to initial levels after 316-day elimination period. Some values estimated from graph. Fish collected in 1978. Baltic Sea, Tvaren Bay Sluggish swimming, stayed close to bottom, folded dorsal fins, minor balance problems NA
DELIBERATE EXPOSURE; FISHES; AQUATIC; BODY; ANIMAL FEEDS; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; FOOD CONTAMINATION; HEALTH HAZARDS Bengtsson, B.-E.; Ofstad, E.B. 1982 Ambio 11(1):38-40				

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7559 Adipose	a) 20 b) 20 Ingestion	a) 9-15 b) 15-9 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak, 60 at d 1 b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak, 40 at 4 hr Measured at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting
7560 Bile	a) 20 b) 20 Ingestion	a) 900-8 b) 3000-8 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak, 2,000 at 6 hr b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak, 5000 at 6 hr Measured at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting

(next page)

Chlorinated paraffins
63449-39-8
EXACT COMPOSITION UNKNONWN OR UNDETERMINED
Quail, Japanese
COTURNIX COTURNIX JAPONICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7561 Eggs	Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 6.6+/-0.7 b) 0.8+/-0.09 c) 0.6+/-0.2 d) 3.6+/-0.6 e) 0.3+/-0.005 f) 0.4+/-0.1 % dose S.E.	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Dose, 4 uCi of [14-C]-labelled compound by gavage. Measured [14-C] in egg yolk 10 d after dose b) Same as a), but measured in egg albumen 5 d after dose c) Same as a), but measured 14-CO2 in egg shells 5 d after dose d) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Dose, 4 uCi of [14-C]-labelled compound by gavage. Measured [14-C] in egg yolk 10 d after dose e) Same as d), but measured in egg albumen 5 d after dose f) Same as d), but measured 14-CO2 in egg shells 5 d after dose. Scintillation counting
7562 Intestine	a) 20 b) 20 Ingestion	a) 1900-0.4 b) 1000-0.9 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak at 1 hr b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak at 1 hr Measured at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting
7563 Kidney	a) 20 b) 20 Ingestion	a) 140-3 b) 200-6 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak at 1 hr b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak at 1 hr Measured at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting
7564 Liver	a) 20 b) 20 Ingestion	a) 150-2 b) 180-2 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak at 1 hr b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak at 1 hr Measured at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting
7565 Ovary	a) 20 b) 20 Ingestion	a) 8-2 b) 8-2 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak, 200 at d 1 b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak, 90 at d 1 Measured, follicles, at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting

(next page)

Chlorinated paraffins
63449-39-8
EXACT COMPOSITION UNKNONWN OR UNDETERMINED

Quail, Japanese
COTURNIX COTURNIX JAPONICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7566 Oviduct	a) 20 b) 20 Ingestion	a) 30-1 b) 20-0.8 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak, 50 at 4 hr b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak, 40 at 4 hr Measured at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting
7567 Uropygial gland	a) 20 b) 20 Ingestion	a) 20-15 b) 30-9 Activity/g tissue as % of administered activity/g body wt. Ranges of means.	a) Not given b) Not given	a) C16-H30.7-Cl3.3, 34.1% chlorination by wt, specific activity 22.7 Ci/mol. Peak, 110 at 6 hr b) C12-H20.1-Cl5.9, 55.9% chlorination by wt, specific activity 16 Ci/mol. Peak, 40 at d 1 Measured at 1 hr and 12 d after gavage of 4 uCi of each [14-C]-labelled compound. Estimated from graph. Scintillation counting
BIRDS; DELIBERATE EXPOSURE; TERRESTRIAL; BILE; KIDNEYS; LIVER; INTESTINES; UROPYGIAL GLAND; ADIPOSE TISSUE; OVARIES; OVIDUCT; CHLORINE ORGANIC COMPOUNDS Biessmann, A.; Brandt, I.; Darnerud, P.O. 1982 Environmental Pollution (Series A) 28:109-120				

Chlorine
7782-50-5
Cl
AtW 35.753, MP -101 C, BP -34.05 C, VP 4800 mm Hg at 20 C, 1 mm Hg at -123 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7568 Brain	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 1,230 ug/g b) 1,250 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
7569 Kidney	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 1,880 ug/g b) 1,850 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
7570 Liver	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 940 ug/g b) 802 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA

(next page)

Chlorine

7782-50-5
Cl
AtW 35.753, MP -101 C, BP -34.05 C, VP 4800 mm Hg at 20 C, 1 mm Hg at -123 C

Cattle
BOS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7571 Muscle	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 680 ug/g b) 602 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
7572 Spleen	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 1,403 ug/g b) 1,280 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7573 Blood, serum	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 105+/-2 mmol/L b) 106+/-2 mmol/L c) 106+/-2 mmol/L d) 107+/-1 mmol/L e) 106+/-1 mmol/L f) 104+/-1 mmol/L g) 106+/-1 mmol/L h) 105+/-1 mmol/L i) 107+/-1 mmol/L S.E.	a) 3 d after lambing, complete pelleted basal diet, 5 cases b) Diet fortified with CSM (35% cottonseed meal), 5 cases c) Diet fortified with SS (7% dried sewage solids), 5 cases d) 42 d after lambing, basal diet e) With CSM f) With SS g) At slaughter, 40 d after weaning, basal diet h) With CSM i) With SS Fine-wool ewes, fed given diets for 2 yr. SS are gamma-irradiated primary municipal sewage solids from Las Cruces, NM. AAS
SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424				

Chlorophenols (No postings in CHEMLINE).

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7574 Bile		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable	a) 6.3+/-3.1 ug/ml b) 5.8+/-1.4 ug/ml c) 3.4+/-1.9 ug/ml d) 2.0+/-1.0 ug/ml e) 1.1 ug/ml	a) 0.1 km downstream from sewer of bleached pulp mill effluents, 5 sample pools, 2-5 fish in each b) 1 km, 3 pools, 2-5 fish each c) 4 km, 2-5 fish d) 6 km, 3 pools, 2-5 fish e) 15 km, 2 pools, 2-5 fish In 1 sample pool, <0.02 ug/ml (below detection limits). Includes PCP, 2,4,6-tri- and 2,3,4,6-tetrachlorophenol, 3,4,5,6-tetrachloroguaiacol, and others. Finland, Lake Saimaa
ENVIRONMENTAL EXPOSURE; FISHES; BILE; AQUATIC; WATER POLLUTION; FINLAND; INDUSTRIAL POLLUTION; INDUSTRIES Oikari, O.J. 1986 Bulletin of Environmental Contamination and Toxicology 36:429-436				

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7575 Bile		a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 7.5+/-3.7 ug/ml b) 3.5 ug/ml c) 3.4 ug/ml d) Trace	a) 1 km downstream from sewer of bleached pulp mill effluents, 2 sample pools, 2-5 fish in each b) 4 km, 1 pool, 2-5 fish c) 6 km, 1 pool, 2-5 fish d) 9 km Includes PCP, 2,4,6-tri-and 2,3,4,6-tetrachlorophenol, 3,4,5,6-tetrachloroguaiacol, and others. Finland, Lake Saimaa GC
ENVIRONMENTAL EXPOSURE; FISHES; BILE; AQUATIC; WATER POLLUTION; FINLAND; INDUSTRIAL POLLUTION; INDUSTRIES Oikari, O.J. 1986 Bulletin of Environmental Contamination and Toxicology 36:429-436				

Cholanthrene, 3-methyl- (8 CI); Bens(j)aceanthrylene, 1,2-dihydro-3-methyl- (9 CI)
56-49-5
C21-H16
MW 268.34, MP 179-180 C, BP 280 C at 80 mm Hg

Mussel
MYTILUS GALLOPROVINCIALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7576 Body	a) 29 b) 28	a) Not given b) Not given	a) 12 ppb b) 13 ppb Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541				

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
7577 Muscle	3	0.001-0.002 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Bass, striped
MORONE SAXATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7578 Gonads	a) 9 b) 10	a) Not detected b) Not detected	a) Not detected b) Not detected	a) Collected 1978, Choptank River b) Collected April, 1979, Rock Hall, Chesapeake Bay. Detection limit 0.3 (1978) and 0.1 (1979). Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
7579 Liver	a) 28 b) 10	Not detected-1.34 ug/g	0.59 ug/g	Collected May, 1978, Turkey Creek. Detection limit 0.3. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
7580 Muscle	a) 28 b) 10	a) Not detected b) Not detected	a) Not detected b) Not detected	a) Collected May, 1978, Turkey Point b) Collected April, 1979, Rock Detection limit 0.3 (1978) and 0.1 (1979). Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102

Chromium

7440-47-3

Cr

AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Blackfish

TAUTOGA ONITIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7581 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

FISHES; BODY; AQUATIC; DELIBERATE EXPOSURE; JUVENILES; COMPARATIVE EVALUATIONS; PESTICIDES; WOOD PRESERVATIVES; PENTACHLOROPHENOL; BIOCONCENTRATION; BIOACCUMULATION; POISONING; WATER POLLUTION; PH

Spehar, R.L.; Nelson, H.P.; Swanson, M.J.; Renoos, J.W. 1985 Environmental Toxicology and Chemistry 4:389-397

Tissue	Cases Exposure Route	Range	Mean	General Information
7582 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammal but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Bluefish

POMATOMUS SALTATRIX

Tissue	Cases Exposure Route	Range	Mean	General Information
7583 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7584 *Muscle*	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Catfish
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7585 *Muscle*	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7586 Blood	a) 78 b) 18 Ingestion	a) Not given b) Not given	a) 0.025 ug/g b) 0.010 ug/g Wet wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS
7587 Bone	a) 62 b) 27 Ingestion	a) Not given b) Not given	a) 0.614 ug/g b) 0.934 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS
DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707				

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7588 Bone	85 Ingestion	a) 0.062-0.718 ug/g b) 0.050-0.750 ug/g c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given Dry wt	a) Not given b) Not given c) 1.10 ug/g d) 0.57 ug/g e) 1.6 ug/g f) 0.04 ug/g g) 2.2 ug/g h) 0.06 ug/g Dry wt	a) 1-4 mo old calves. Mothers grazing in untreated (control) pastures </= 6 yr, 6 cases b) 1-4 mo old calves, mothers grazing in pasture treated with anaerobically digested wastewater sludge (exposed), 9 cases c) 8-9 mo old calves, control mothers, 35 cases d) 8-9 mo old calves, exposed mothers, 70 cases e) Rib from 3 mo old calves, control mothers, 5 cases f) Rib from same calves at 15 mo g) Rib from 3 mo old calves, exposed mothers, 10 cases h) Rib from same calves at 15 mo.
7589 Brain	a) 58 b) 26 Ingestion	a) Not given b) Not given	a) 0.20 ug/g b) 0.24 ug/g Dry wt	a) 8-9 mo old calves, mothers grazing in untreated pasture b) 8-9 mo old calves, mothers grazing in pastures treated with anaerobically digested wastewater sludges Grazing </= 6 yr in given pasture.
DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168				

Tissue	Cases Exposure Route	Range	Mean	General Information
7590 Brain	a) 59 b) 24 Ingestion	a) Not given b) Not given	a) 0.209 ug/g b) 0.306 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS
DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707				

Chromium

7440-47-3

Cr

AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Cattle

BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7591 Diaphragm	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 Ingestion	a) Not given b) Not given c) 0.025-0.338 ug/g d) 0.042-0.225 ug/g e) Not given f) Not given Dry wt	a) 0.088 ug/g b) 0.110 ug/g c) Not given d) Not given e) 0.50 ug/g f) 0.30 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7592 Diaphragm	a) 63 b) 29 Ingestion	a) Not given b) Not given	a) 0.206 ug/g b) 0.215 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS
7593 Heart	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 0.172 ug/g b) 0.434 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7594 Kidney	90	a) 1.9-3.3 mg/kg b) Not detected Wet wt	a) Not given b) Not given	a) 9 cases b) 81 cases Detection limit 0.2 mg/L. Mineral profile, 1981-83. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Tissue	Cases Exposure Route	Range	Mean	General Information
7595 Kidney	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 g) 5 h) 10 i) 5 j) 10 Ingestion	a) Not given b) Not given c) 0.100-0.150 ug/g d) 0.175-0.429 ug/g e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given Dry wt	a) 0.050 ug/g b) 0.075 ug/g c) Not given d) Not given e) 0.31 ug/g f) 0.25 ug/g g) 0.20 ug/g h) 0.28 ug/g i) 0.20 ug/g j) 0.36 Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures </= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers g) At weaning (9 mo), mothers in control pastures h) Mothers in exposed pastures i) 150 d after weaning. Fed regular diet. From mothers in control pastures j) Same as i) except mothers in exposed pastures.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7596 Kidney	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 0.231 ug/g b) 0.390 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7597 Kidney	1 Ingestion	Not applicable	14.2 ug/g Wet wt	Hereford X Angus which had died after licking wood ashes containing 5212 ug/g. 5 other cows also became ill. Treatment included sulfamethazine, B vitamins, fluid electrolytes, bismuth subsalicylate and mineral oil. 4 died. Diarrhea, recumbency, abdominal pain Hemorrhages, mucosal destruction, congested blood vessels and abnormal epithelial cells in kidney AAS

LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; AUTOPSIES; METAL POISONING; ARSENIC; COPPER; CHROMIUM; ACCIDENTAL POISONING

Thatcher, C.D.; Meldrum, J.B.; Wikse, S.E.; Whittier, W.D. 1985 Journal of the American Veterinary Medical Association 187(2):179-182

Tissue	Cases Exposure Route	Range	Mean	General Information
7598 Liver	229	a) 0.2-3.0 mg/kg b) Not detected Wet wt	a) Not given b) Not given	a) 32 cases b) 197 cases Detection limit 0.2 mg/L. Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Tissue	Cases Exposure Route	Range	Mean	General Information
7599 Liver	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 g) 5 h) 10 i) 5 j) 10 Ingestion	a) Not given b) Not given c) 0.025-0.135 ug/g d) 0.067-0.517 ug/g e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given Dry wt	a) 0.017 ug/g b) 0.034 ug/g c) Not given d) Not given e) 0.29 ug/g f) 0.24 ug/g g) 0.17 ug/g h) 0.26 ug/g i) 0.40 ug/g j) 0.49 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <=6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers g) At weaning (9 mo), mothers in control pastures h) Mothers in exposed pastures i) 150 d after weaning. Fed regular diet. From mothers in control pastures j) Same as i) except mothers in exposed pastures.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7600 Liver	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 0.186 ug/g b) 0.365 ug/g Dry wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7601 Liver	1 Ingestion	Not applicable	10.6 ug/g Wet wt	Hereford X Angus which had died after licking wood ashes containing 5212 ug/g. 5 other cows also became ill. Treatment included sulfamethazine, B vitamins, fluid electrolytes, bismuth subsalicylate and mineral oil. 4 died. Diarrhea, recumbency, abdominal pain Hemorrhages, mucosal destruction, congested blood vessels and abnormal epithelial cells in kidney AAS

LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; AUTOPSIES; METAL POISONING; ARSENIC; COPPER; CHROMIUM; ACCIDENTAL POISONING

Thatcher, C.D.; Meldrum, J.B.; Wikse, S.E.; Whittier, W.D. 1985 Journal of the American Veterinary Medical Association 187(2):179-182

Tissue	Cases Exposure Route	Range	Mean	General Information
7602 Milk	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.248 ug/g b) 0.160 ug/g Wet wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Chromium

7440-47-3

Cr

AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Clam

RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7603 Body		a) Not given b) Not given	a) 2.1+/-0.90 ppm b) 3.8+/-0.9 ppm Dry wt	Samples collected from entrance of the Chef Menteur Pass Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS
MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158				

Cod

GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
7604 Body	7	<0.01-0.02 mg/kg Wet wt	0.01 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1981-84. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Crappie

POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7605 Muscle	2	0.002-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Crayfish
PROCAMBARUS CLARKII

Tissue	Cases Exposure Route	Range	Mean	General Information
7606 Antennal gland	a) 10 b) 10 c) 10 d) 10 e) 4	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 38.2+/-5.0 ug/g b) 37.5+/- .2 ug/ c) 147+/-42 u/g d) 286+/-88 ug/g e) 1170+/-202 ug/g Dry wt	a) Controls, not exposed b) Exposed to 10 mg/L c) 37 mg/L d) 136 mg/L e) 500 mg/L 5 hr after completion of exposures to Cr(VI) (as Na2-Cr-04) for 96 hr. Intermolt adults (17.5-34.8 g) acclimated for 10 d before exposure. Total accumulations for all tissues measured (gill, hepatopancreas, antennal gland, muscle) were: 52.7, 126.8, 296.2, 712.3, 2205.0 ug/g, respectively. Spain, Valencia, Lake Albufera AAS
7607 Gills	a) 10 b) 10 c) 10 d) 10 e) 4	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 13.1+/-1.6 ug/g b) 67.2+/-17.0 ug/g c) 89.4+/-13.3 ug/g d) 230+/-69 ug/g e) 541+/-125 ug/g Dry wt	a) Controls, not exposed b) Exposed to 10 mg/L c) 37 mg/L d) 136 mg/L e) 500 mg/L 5 hr after completion of exposures to Cr(VI) (as Na2-Cr-04) for 96 hr. Intermolt adults (17.5-34.8 g) acclimated for 10 d before exposure. Total accumulations for all tissues measured (gill, hepatopancreas, antennal gland, muscle) were: 52.7, 126.8, 296.2, 712.3, 2205.0 ug/g, respectively. Spain, Valencia, Lake Albufera AAS
7608 Hepatopancreas	a) 10 b) 10 c) 10 d) 10 e) 4	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.0+/-0.4 ug/g b) 20.3+/-3.5 ug/g c) 55.9+/-25.0 ug/g d) 189+/-99 ug/g e) 46.2+/-102 ug/g Dry wt	a) Controls, not exposed b) Exposed to 10 mg/L c) 37 mg/L d) 136 mg/L e) 500 mg/L 5 hr after completion of exposures to Cr(VI) (as Na2-Cr-04) for 96 hr. Intermolt adults (17.5-34.8 g) acclimated for 10 d before exposure. Total accumulations for all tissues measured (gill, hepatopancreas, antennal gland, muscle) were: 52.7, 126.8, 296.2, 712.3, 2205.0 ug/g, respectively. Spain, Valencia, Lake Albufera AAS
7609 Muscle	a) 10 b) 10 c) 10 d) 10 e) 4	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.4+/-0.2 ug/g b) 1.8+/-0.4 ug/g c) 3.9+/-1.2 ug/g d) 7.3+/-1.5 ug/g e) 32.0+/-3.0 ug/g Dry wt	a) Controls, not exposed b) Exposed to 10 mg/L c) 37 mg/L d) 136 mg/L e) 500 mg/L 5 hr after completion of exposures to Cr(VI) (as Na2-Cr-04) for 96 hr. Intermolt adults (17.5-34.8 g) acclimated for 10 d before exposure. Total accumulations for all tissues measured (gill, hepatopancreas, antennal gland, muscle) were: 52.7, 126.8, 296.2, 712.3, 2205.0 ug/g, respectively. Spain, Valencia, Lake Albufera AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; CRAYFISHES; GILLS; MUSCLES; HEPATOPANCREAS; ANTENNAL GLANDS; CHROMIUM; METALS; WATER POLLUTION; SPAIN

Hernandez, F.; Diaz, J.; Medina, J.; Del Ramo, J.; Pastor, A. 1986 Bulletin of Environmental Contamination and Toxicology 36:851-857

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Duck, mottled
ANAS FULVIGULA

Tissue	Cases Exposure Route	Range	Mean	General Information
7610 Bone	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.9+/-0.1 mg/kg b) 1.0+/-0.1 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7611 Feathers	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.9+/-0.5 mg/kg b) 0.0+/-0.0 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Earthworm

Tissue	Cases Exposure Route	Range	Mean	General Information
7612 Body		a) Not given b) Not given	a) 9.5 mg/g b) 9.5 mg/g Wet wt	a) Controls, field with no sewage sludge conditioning b) Treatment group from field with sewage sludge conditioning, 2-OT/ha since 1976. France, Worben
BODY; EARTHWORMS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FRANCE; POLYCHLORINATED BIPHENYLS; METALS; CADMIUM; ZINC; LEAD; COPPER; CHROMIUM; BIOACCUMULATION; SEWAGE; LAND POLLUTION Diercxsens, P.; de Weck, D.; Borsinger, N.; Rosset, B.; Tarradellas, J. 1985 Chemosphere 14(5):511-522				

Eel
ANGUILLA ANGUILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7613 Body	6	0.02-0.34 mg/kg Wet wt	0.08 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Lake IJssel, 1981-84. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Eel, American
ANGUILLA ROSTRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7614 Muscle	2	0.002-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
7615 Muscle	a) 127 b) 80	a) Not detected-1.20 ug/g b) Not detected-1.90 ug/g	a) Not detected b) 0.16 ug/g	a) Collected 1978 b) Collected 1979 Detection limit 0.3 ug/g (in 1978) and 0.1 (in 1979). Means calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102

Gadwall
ANAS STREPERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7616 Bone	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 0.7+/-0.1 mg/kg b) 0.6+/-0.0 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7617 Feathers	a) 61 b) 2 Ingestion	a) Not given b) Not given	a) 5.5+/-1.6 mg/kg b) 3.1+/-1.1 mg/kg Dry wt S.E.	a) Without ingested shot b) With of ingested shot in gizzard No significant difference. Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS

Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:168-172

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Herring, Baltic
CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7618 Body	7	<0.01-0.07 mg/kg Wet wt	0.02 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1981-84. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.G.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Insect

Tissue	Cases Exposure Route	Range	Mean	General Information
7619 Liver	a) 5 b) 7	a) 1.1-7.1 ppm b) Not detected-1.0 ppm Dry wt	a) 3.03 ppm b) Not given Dry wt Geometric	a) Detected in 5/5 composite samples of aquatic insects collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 3/7 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. Detection limit 0.04 ppm dry wt. California, San Joaquin Valley AAS
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Killifish
FUNDULUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7620 Body	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 4.4 ug/g b) 3.6 ug/g c) 7.6 ug/g Dry wt	a) Providence Barge, Providence River b) Wickford Tower, Narragansett Bay c) Price Neck, Rhode Island Sound Prey of the common tern collected in 1981 near nesting sites. a) closest to Providence, major area of electroplating industry. Rhode Island AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; FISHES; COPPER; IRON; ZINC; NICKEL; LEAD; CHROMIUM; MAGNESIUM; MANGANESE; BODY; LIVER; WATER POLLUTION; INDUSTRIAL AREAS; INDUSTRIAL POLLUTION; RHODE ISLAND Custer, T.W.; Franson, J.C.; Moore, J.F.; Myers, J.E. 1986 Environmental Pollution (Series A) 41:33-52				

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Mosquitofish
GAMBUSIA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7621 Body	a) 2 b) 4	a) 0.36-0.42 ppm b) Not detected Dry wt	a) 0.398 ppm b) Not detected Dry wt Geometric	a) Detected in 2/2 composite samples collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 0/4 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. Detection limit was 0.4 ppm dry wt. California, San Joaquin Valley AAS

BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC

Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63

Mussel
MYTILUS CALIFORNIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7622 Body	a) 405 b) 630 c) 495 d) 150	a) 1.70+/-0.10-3.63+/-0.25 ug/g b) 2.00+/-0.25-3.80+/-0.51 ug/g c) 1.52+/-0.03-6.12+/-1.67 ug/g d) 1.53+/-0.21-1.60+/-0.20 ug/g Dry wt	a) Not given b) Not given c) Not given d) Not given	a) Transplanted to bay in 1980 b) Transplanted in 1981 c) Transplanted in 1982 d) From intertidal collection site, not transplanted, range over 1980-2 45-65 mm animals transplanted to 16 sites for 4-5.5 mo. Gonads removed before levels measured. California, San Francisco Bay

ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; MUSSELS; BODY; AQUATIC; WATER POLLUTION; METALS; SILVER; ALUMINUM; CADMIUM; CHROMIUM; COPPER; MERCURY; MANGANESE; LEAD; ZINC; CALIFORNIA

Smith, D.R.; Stephenson, M.D.; Flegal, A.R. 1986 Environmental Toxicology and Chemistry 5:129-138

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7623 Body	7	0.21-0.81 mg/kg Wet wt	0.43 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Eastern Scheldt, 1981-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7624 Body		a) Not detected-0.5+/-0.9 mg/kg b) Not detected-0.5+/-0.8 mg/kg c) Not detected-0.5+/-8 mg/kg d) Not detected-0.8+/-1.4 mg/kg e) Not detected-2.0+/-3.5 mg/kg f) Not detected-0.5+/-0.8 mg/kg	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Palmetto Bay Marina, spring, 10 stations b) Summer c) Outdoor Resorts Marina, spring, 8 stations d) Summer e) Fripp Island Marina, spring, 9 stations f) Summer Collected from mid-intertidal portion of reefs. 15 animals/sample. Sampled weekly 3/29-4/4 and 7/26-8/11/83. Detection limit 1.0 mg/kg. Undetectable in 8 (spring) and 7 (summer) sites. South Carolina AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; OYSTERS; MOLLUSKS; BODY; CADMIUM; CHROMIUM; COPPER; LEAD; NICKEL; ZINC; METALS; WATER POLLUTION; SOUTH CAROLINA
Marcus, J.M.; Thompson, A.M. 1986 Bulletin of Environmental Contamination and Toxicology 36:587-594

Tissue	Cases Exposure Route	Range	Mean	General Information
7625 Body		Not given	1.3+/-0.90 Dry wt	Samples collected from entrance of the Inner Harbor Navigation Canal at Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS

MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS
Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158

Oyster, cape
CRASSOSTREA MARGARITACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7626 Body	426 (approx)	0.1+/-<0.1-4.6+/-1.5 ug/g Wet wt	Not applicable	Range of means. From survey of metal levels in oysters collected 7/77-8/79 at 25 sites along 500 km of relatively undeveloped coastline from near Mossel Bay to the Port Alfred area. Study provided data for the national marine pollution monitoring program. South Africa, southern coast AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; OYSTERS; BODY; ZINC; CADMIUM; COPPER; LEAD; IRON; MANGANESE; NICKEL; COBALT; CHROMIUM; SOUTH AFRICA; WATER POLLUTION; METALS
Watling, H.R.; Watling, R.J. 1982 Bulletin of Environmental Contamination and Toxicology 28:460-466

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Pelican, brown
PELECANUS OCCIDENTALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7627 Bone	a) 10 b) 10	a) Not given b) Not given	a) 1.26+/-0.269 ppm b) 0.840+/-0.173 ppm Dry wt	a) Humerus b) Ribs Specimens collected on 11/30 and 12/1/80 in vicinity of Bahia de los Angeles, Gulf of California. Detection limit=0.05 ppm wet wt. California AAS
7628 Kidney	10	Not given	3.71+/-3.68 ppm Dry wt	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.1 ppm wet wt. California AAS
7629 Liver	10	Not given	0.493+/-0.251 ppm Dry wt	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.05 ppm wet wt. California AAS
ADIPOSE TISSUE; MUSCLES; BODY; LIVER; KIDNEYS; FEATHERS; BONES; PANCREAS; GONADS; PELICANS; AQUATIC; ENVIRONMENTAL EXPOSURE; CALIFORNIA; METAL POISONING; ARSENIC; CADMIUM; CHROMIUM; COPPER; MERCURY; LEAD; SELENIUM; ZINC; DDE; BIOACCUMULATION Ohlendorf, H.M.; Anderson, D.; Boellstorff, D.E.; Mulhern, B.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:183-192				

Pike-perch
STIZOSTEDION LUCIOPERCA

Tissue	Cases Exposure Route	Range	Mean	General Information
7630 Body	a) 7 b) 3	a) <0.01-0.07 mg/kg b) 0.01-0.02 mg/kg Wet wt	a) 0.02 mg/kg b) 0.01 mg/kg Wet wt	a) Collected Lake IJssel b) Collected Hollands Diep 1981-84. Edible parts, mixed samples weighing about 20 kg. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Chromium

7440-47-3

Cr

AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Pintail

ANAS ACUTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7631 Bone	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 1.2 mg/kg b) 0.8+/-0.1 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7632 Feathers	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 0.4+/-0.1 mg/kg b) 0.0+/-0.00 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.001$). Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Scaup, lesser

AYTHYA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7633 Bone	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 1.5+/-0.1 mg/kg b) 1.1+/-0.1 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7634 Feathers	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 0.5+/-0.1 mg/kg b) 1.1+/-0.7 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Shad, American
ALOSA SAPIDISSIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7635 Gonads	5	Not detected-0.18 ug/g	Not given	Collected May, 1979, waters of Hartford County. Detection limit 0.1. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
7636 Muscle	5	Not detected	Not detected	Collected May, 1979, waters of Hartford County. Detection limit 0.1. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102				

Shoveler
ANAS CLYPEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7637 Bone	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 0.6+/-0.1 mg/kg b) 0.6+/-0.1 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7638 Feathers	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 0.2+/-0.1 mg/kg b) 0.4+/-0.2 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Shrimp
CRANGON CRANGON

Tissue	Cases Exposure Route	Range	Mean	General Information
7639 Body	7	0.10-0.71 mg/kg Wet wt	0.26 mg/kg Wet wt	Analysed cooked and unpeeled. Mixed samples weighed about 20 kg. Collected from Western Wadden Sea, 1981-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Tissue	Cases Exposure Route	Range	Mean	General Information
7640 Muscle	a) 30 b) 30 c) 30 d) 30	a) Not given b) Not given c) Not given d) Not given	a) 0.99+/-0.16 ug/g b) 0.89+/-0.33 ug/g c) 0.73+/-0.18 ug/g d) 0.94+/-0.29 ug/g Dry wt	a) Aquaculture pond, seawater with 10% mixture of effluent, low density (4.5 shrimp/sq m), 29% survival b) Same effluent mixture, high density (30 shrimp/sq m), 27% survival c) Seawater only, fed Purina Ration, low density (6.0 shrimp/sq m), 50% survival Effluent from Harbor Branch Foundation treatment plant, seawater from Harbor Branch Foundation ship canal. Florida, Fort Pierce AAS

MUSCLES; AQUATIC; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; CRUSTACEANS; CADMIUM; SELENIUM; CHROMIUM; COPPER; LEAD; WATER POLLUTION; FLORIDA

Landau, M.; Pierce, R.H.; Williams, L.D.; Norris, D.R. 1985 Bulletin of Environmental Contamination and Toxicology 35:537-545

Sole
SOLEA SOLEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7641 Body	7	0.01-0.02 mg/kg Wet wt	0.02 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1981-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Chromium

7440-47-3

Cr

AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Sponge
SPIRASTRELLA CUSPIDIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7642 Body		1000-2000 ug/g Dry wt	1520 ug/g Dry wt	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Sponge (P. foetida)
PROSTYLYSSA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7643 Body		0-0.1 ug/g Dry wt	Not given	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Sunfish, redbreast
LEPOMIS AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7644 Muscle	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7645 Muscle	2	0.001-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Teal, green-winged
ANAS CRECCA

Tissue	Cases Exposure Route	Range	Mean	General Information
7646 Bone	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 1.3+/-0.2 mg/kg b) 3.6+/-2.0 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.05$). Texas, Chambers County ES
7647 Feathers	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 0.4+/-0.8 mg/kg b) 0.4+/-0.1 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Tern, common
STERNA HIRUNDO

Tissue	Cases Exposure Route	Range	Mean	General Information
7648 Liver	a) 14 b) 15 c) 6	a) Not detected-18.31 ug/g b) Not detected-14.52 ug/g c) Not detected-0.97 ug/g Dry wt	a) Not given b) Not given c) Not given	a) Providence Barge, Providence River b) Wickford Tower Narragansett Bay c) Price Neck, Rhode Island Sound Nesting sites, a) closest to Providence, major area of electroplating industry. 13-16 day old animals, 1981. Detection limit 0.05 ug/g. Rhode Island AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; FISHES; COPPER; IRON; ZINC; NICKEL; LEAD; CHROMIUM; MAGNESIUM; MANGANESE; BODY; LIVER; WATER POLLUTION; INDUSTRIAL AREAS; INDUSTRIAL POLLUTION; RHODE ISLAND Custer, T.W.; Franson, J.C.; Moore, J.F.; Myers, J.E. 1986 Environmental Pollution (Series A) 41:33-52				

Chromium

7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Turtle, snapping
CHELYDRA SERPENTINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7649 Kidney	a) 7 b) 6 c) 8 d) 3 e) 8	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.93+/-0.47 ppm b) 1.26+/-0.73 ppm c) 2.97+/-1.52 ppm d) 2.70+/-2.18 ppm e) 1.13+/-0.77 ppm Wet wt	a) Males, uncontaminated area of Maryland b) Females c) Contaminated brackish water, Hakensack Meadowlands New Jersey, males d) Females e) Contaminated fresh water, New Jersey, males Collected 6-8/81 and 6-8/82. Frequency of detection 100%. Detection limit 0.05 ppm. New Jersey; Maryland Lowered lipid content, reduced growth in animals from brackish-water area in NJ AAS
7650 Liver	a) 7 b) 6 c) 8 d) 3 e) 8	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.0+/-0.76 ppm b) 1.97+/-1.48 ppm c) 0.60+/-0.32 ppm d) 0.60+/-0.23 ppm e) 0.36+/-0.32 ppm Wet wt	a) Males, uncontaminated area of Maryland b) Females c) Contaminated brackish water, Hakensack Meadowlands New Jersey, males d) Females e) Contaminated fresh water, New Jersey, males Collected 6-8/81 and 6-8/82. Frequency of detection 100%. Detection limit 0.05 ppm. New Jersey; Maryland Lowered lipid content, reduced growth in animals from brackish-water area in NJ AAS

ENVIRONMENTAL EXPOSURE; TURTLES; AQUATIC; LIVER; KIDNEYS; ADIPOSE TISSUE; NEW JERSEY; MARYLAND; CADMIUM; CHROMIUM; COPPER; LEAD; MERCURY; NICKEL; ZINC; CHLORDANE; NONACHLOR; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDES; METALS; WATER POLLUTION

Albers, P.H.; Sileo, L.; Mulhern, B.M. 1986 Archives of Environmental Contamination and Toxicology 15:39-49

Chrysene

218-01-9
C18-H12
MW 228.28, MP 255-256 C, BP 448 C

Burbot
LOTA LOTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7651 Gall bladder		Not detected	Not detected	Collected 4/28/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with two other, also undetected, PAH's. Finland, Archipelago Sea GLC/MS

(next page)

Chrysene
218-01-9
C18-H12
MW 228.28, MP 255-256 C, BP 448 C

Burbot
LOTA LOTA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7652 Liver		Not given	180 ug/kg Wet wt	Collected 4/28/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with benzo(a)anthracene and triphenylene. Finland, Archipelago Sea GLC/MS
7653 Muscle		Not given	3 ug/kg Wet wt	Collected 4/28/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with benzo(a)anthracene and triphenylene. Finland, Archipelago Sea GLC/MS
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343				

Clam
TRIDACNA MAXIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7654 Body		a) <0.03-1.3 ug/g b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) <0.04-1.4 ug/g h) Not applicable i) Not applicable j) <0.06-<0.06 ug/g	a) Not given b) 0.05 ug/g c) 0.5 ug/g d) <0.05 ug/g e) <0.06 ug/g f) <0.06 ug/g g) Not given h) 0.2 ug/g i) 0.1 ug/g j) <0.06 ug/g	a) Heron Island, 7 sites b) Polmaise Reef, 1 site c) Masthead Island, 1 site d) Wistari Reef e) One Tree Island, 1 site f) Wreck Island, 1 site g) Lizard Island, 4 sites h) Carter Reef, 1 site i) Flinder's Reef, 1 site j) Orpheus Island, 3 sites Collections in Great Barrier Reef. Levels are lowest reported in the world. Detection limit <0.07 ug/kg wet wt. Australia, Great Barrier Reef Fluorimetry
BODY; CLAMS; AQUATIC; ENVIRONMENTAL EXPOSURE; AUSTRALIA; POLYCYCLIC AROMATIC HYDROCARBONS; WATER POLLUTION; LAND POLLUTION; BIOACCUMULATION; ANIMAL POPULATIONS Smith, J.D.; Bagg, J.; Bycroft, B.M. 1985 Environmental Science and Technology 18(5):353-358				

Chrysene
218-01-9
C18-H12
MW 228.28, MP 255-256 C, BP 448 C

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7655 Body		a) Not detected b) Not detected-15 ug/kg Wet wt	a) Not given b) Not given	a) Collections from 4 sites, 10/9 and 10/12/78 b) From 3 sites, 5/9, 5/23, 6/5/79 Detection limit 0.5 ug/kg. Composite samples of at least 10 individuals analyzed. Mixture with benzo(a)anthracene and tryphenylene. Finland, Archipelago Sea GLC/MS
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7656 Body		Not given	58 ppb Wet wt	Mean of 8 samples collected 5/80-6/80, Inner Harbor Navigation Canal at Lake Pontchartrain. Louisiana, Lake Pontchartrain GC/MS
ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MOLLUSKS; AQUATIC; LOUISIANA; POLYCYCLIC AROMATIC HYDROCARBONS McFall, J.A.; Antoine, S.R.; DeLeon, I.R. 1985 Chemosphere 14(10):1561-1569				

Tissue	Cases Exposure Route	Range	Mean	General Information
7657 Body		a) Not detectable-14.2+/-16.6 ug/kg b) Not detectable-8.3+/-14.4 ug/kg c) Not detectable-4.3+/-7.4 ug/g d) Not detectable	a) Not given b) Not given c) Not given d) Not given	a) Palmetto Bay Marina, 10 sites, spring b) Summer c) Outdoor Resorts Marina, 8 sites, spring d) Summer Pooled, 15 adults/sample, collected weekly from mid-intertidal areas of reefs in different sites at each marina. 3/29-4/14/83 and 7/26-8/11/83. For each group, n=3. Ranges of means. Detection limit 8.0 ug/kg. South Carolina, Beaufort County HPLC
AQUATIC; ENVIRONMENTAL EXPOSURE; MOLLUSKS; SOUTH CAROLINA; WATER POLLUTION; FOOD CONTAMINATION; BENZOPYRENE; POLYCYCLIC AROMATIC HYDROCARBONS Marcus, J.M.; Stokes, T.P. 1985 Bulletin of Environmental Contamination and Toxicology 35:835-844				

Chrysene

218-01-9
C18-H12
MW 228.28, MP 255-256 C, BP 448 C

Pike-perch
STIZOSTEDION LUCIOPERCA

Tissue	Cases Exposure Route	Range	Mean	General Information
7658 Gall bladder		Not detected	Not detected	Collected 7/3/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with two other, also undetected, PAH's. Finland, Archipelago Sea GLC/MS
7659 Liver		Not detected	Not detected	Collected 7/3/79, one site. Detection limit 0.5 ug/kg. Composite sample. Measured in a mixture with two other, also undetected, PAH's. Finland, Archipelago Sea GLC/MS
7660 Muscle		Not detected-15 ug/kg Wet wt	Not given	Collected from 2 sites, 12/1/78, 7/3/79. Detection limit 0.5 ug/kg. Composite samples. Measured in a mixture with benzo(a)anthracene and triphenylene. Finland, Archipelago Sea GLC/MS

ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; FISHES; MUSCLES; LIVER; GALL BLADDER; BODY; MOLLUSKS; POLYCYCLIC AROMATIC HYDROCARBONS; FINLAND; WATER POLLUTION

Rainio, K.; Linko, R.R.; Ruotsila, L. 1986 Bulletin of Environmental Contamination and Toxicology 37:337-343

Clophen A 60

11096-99-4
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Hare
LEPUS EROPAUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7661 Adipose	26	Not given	2.012 mg/kg	Sedentary populations from agricultural biotype with no industry present. Low-chlorinated biphenyls more persistent than high. Germany, West GC
7662 Muscle	26	Not given	0.003 mg/kg	Sedentary populations from agricultural biotype with no industry present. Low-chlorinated biphenyls more persistent than high. Germany, West GC

ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION

Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532

Clophen A 60
11096-99-4
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Partridge
PERDIX PERDIX

Tissue	Cases Exposure Route	Range	Mean	General Information
7663 Adipose	16	Not given	0.767 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in all of 17. Low-chlorinated biphenyls more persistent than high. Germany, West GC
7664 Muscle	17	Not given	0.001 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in all of 17. Low-chlorinated biphenyls more persistent than high. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7665 Body	73	0.134-4.610 mg/kg	1.677 mg/kg	Collected in fall of 1980 and spring of 1981. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616				

Pheasant, ring-necked
PHASIANUS COLCHICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7666 Adipose	4	Not given	4.902 mg/kg	Sedentary populations from agricultural biotype with no industry present. Low-chlorinated biphenyls more persistent than high. Germany, West GC

(next page)

Clophen A 60
11096-99-4
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Pheasant, ring-necked
PHASIANUS COLCHICUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7667 Muscle	4	Not given	0.007 mg/kg	Sedentary populations from agricultural biotype with no industry present. Low-chlorinated biphenyls more persistent than high. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 *Bulletin of Environmental Contamination and Toxicology* 34:527-532				

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7668 Body	227	0.134-4.610 mg/kg	1.677 mg/kg	Collected in fall of 1980 and spring of 1981. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Mans, D. 1985 *Bulletin of Environmental Contamination and Toxicology* 34:608-616				

Woodcock
SCOLOPAX RUSTICOLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7669 Adipose	8	Not given	1.864 mg/kg	Low-chlorinated biphenyls more persistent than high. Germany, West GC
7670 Muscle	8	Not given	0.017 mg/kg	Low-chlorinated biphenyls more persistent than high. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Clophen C
63346-19-0
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Hare
LEPUS EROPAUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7671 Adipose	26	Not given	8.514 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 22 of 26. Low-chlorinated biphenyls more persistent than high. Germany, West GC
7672 Muscle	26	Not given	0.021 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 22 of 26. Low-chlorinated biphenyls more persistent than high. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Partridge
PERDIX PERDIX

Tissue	Cases Exposure Route	Range	Mean	General Information
7673 Adipose	16	Not given	7.873 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 15 of 17. Low-chlorinated biphenyls more persistent than high. Germany, West GC
7674 Muscle	17	Not given	0.039 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 15 of 17. Low-chlorinated biphenyls more persistent than high. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Clophen C

63346-19-0
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7675 Body	73	0.102-1.120 mg/kg	0.463 mg/kg	Collected in fall of 1980 and spring of 1981. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616				

Pheasant, ring-necked
PHASIANUS COLCHICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7676 Adipose	4	Not given	6.358 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 3 of 4. Low-chlorinated biphenyls more persistent than high. Germany, West GC
7677 Muscle	4	Not given	0.027 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 3 of 4. Low-chlorinated biphenyls more persistent than high. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7678 Body	227	0.102-1.120 mg/kg	0.463 mg/kg	Collected in fall of 1980 and spring of 1981. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616				

Clophen C

63346-19-0
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
Woodcock
SCOLOPAX RUSTICOLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7679 Adipose	8	Not given	3.645 mg/kg	Low-chlorinated biphenyls more persistent than high. Germany, West GC
7680 Muscle	8	Not given	0.047 mg/kg	Low-chlorinated biphenyls more persistent than high. Germany, West GC

ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION

Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532

Cobalt

7440-48-4
Co
AtW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
7681 Muscle	8	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1985 Environment International 9:361-362

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7682 Muscle	2	0.001-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1985 Environment International 9:361-362

Cobalt
7440-48-4
Co
AtW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C

Catfish
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7683 Muscle	2	0.001-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7684 Brain	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.009 ug/g b) 0.019 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
7685 Kidney	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.020 ug/g b) 0.041 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
7686 Liver	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.047 ug/g b) 0.077 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
7687 Muscle	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.07 ug/g b) 0.01 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
7688 Spleen	a) 6 b) 6 Ingestion	a) Not given b) Not given	a) 0.02 ug/g b) 0.02 ug/g Wet wt	a) Controls, fed normal feedlot ration b) Fed feedlot ration amended with 12% municipal sewage sludge Fort Collins anaerobically digested sludge. Colorado NA
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Cobalt
7440-48-4
Co
AtW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7689 Muscle	2	0.002-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Eel, American
ANGUILLA ROSTRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7690 Muscle	2	0.002-0.002 mg/kg Wet wt	0.002 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Oyster, cape
CRASSOSTREA MARGARITACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7691 Body	426 (approx)	0.01+/-0.01-0.28 ug/g Wet wt	Not applicable	Range of means. From survey of metal levels in oysters collected 7/77-8/79 at 25 sites along 500 km of relatively undeveloped coastline from near Mossel Bay to the Port Alfred area. Study provided data for the national marine pollution monitoring program. South Africa, southern coast AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; OYSTERS; BODY; ZINC; CADMIUM; COPPER; LEAD; IRON; MANGANESE; NICKEL; COBALT; CHROMIUM; SOUTH AFRICA; WATER POLLUTION; METALS Watling, H.R.; Watling, R.J. 1982 Bulletin of Environmental Contamination and Toxicology 28:460-466				

Cobalt
7440-48-4
Co
AtW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7692 Bone	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 3.4+/-0.5 ug/g b) 6.2+/-0.5 ug/g c) 4.7+/-0.5 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7693 Kidney	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 1.4+/-0.1 ug/g b) 1.6+/-0.1 ug/g c) 1.7+/-0.1 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7694 Liver	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 0.9+/-0.04 ug/g b) 0.9+/-0.04 ug/g c) 0.9+/-0.04 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7695 Muscle	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 0.7+/-0.1 ug/g b) 0.5+/-0.1 ug/g c) 0.6+/-0.1 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7696 Spleen	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 0.8+/-0.1 ug/g b) 0.8+/-0.1 ug/g c) 1.1+/-0.1 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE

Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424

Cobalt

7440-48-4
Co
AtW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C

Sponge
SPIRASTRELLA CUSPIDIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7697 Body		10-50 ug/g Dry wt	26.0 ug/g Dry wt	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Sponge (P. foetida)
PROSTYLYSSA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7698 Body		3-7.5 ug/g Dry wt	5.0 ug/g Dry wt	Collected during 1978-80 Levels higher during post-monsoon (Oct-Jan). India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Sunfish, redbreast
LEPOMIS AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7699 Muscle	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Cobalt
7440-48-4
Co
AtW 58.9332, MP 1493 C, BP 3100 C, VP 1 mm Hg at 1910 C

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7700 Muscle	2	0.001-0.001 mg/kg Wet wt	0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Bass, striped
MORONE SAXATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7701 Gonads	a) 9 b) 10	a) 0.85-3.90 ug/g b) 2.59-6.06 ug/g	a) 2.25 ug/g b) 4.25 ug/g	a) Collected 1978, Choptank River b) Collected April, 1979, Rock Hall, Chesapeake Bay. Detection limit 0.1 ug/g. Means calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
7702 Liver	a) 28 b) 10	0.86-23.5 ug/g	9.098 ug/g	Collected May, 1978, Turkey Creek. Detection limit 0.1. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
7703 Muscle	a) 28 b) 10	a) Not detected b) 0.11-1.08	a) Not detected b) 0.78 ug/g	a) Collected May, 1978, Turkey Point b) Collected April, 1979, Rock Detection limit 0.1. Mean calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING
Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Beetle

Tissue	Cases Exposure Route	Range	Mean	General Information
7704 Body		Not given	28 mg/kg Dry wt	Larvae collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Genera were DENDROIDES and NEOPYROCHROA sp. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Beetle, bark
DENDROIDES CANADENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7705 Body		Not given	22 mg/kg Dry wt	Larvae collected June-Oct 79 at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Beetle, carrion
NICROPHORUS TOMENTOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7706 Body		a) Not given b) Not given	a) 12 mg/kg b) 13 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Blackfish

TAUTOGA ONITIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7707 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Blowfly

CALLIPHORIDAE sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7708 Body		Not given	18 mg/kg Dry wt	Collected June-Oct 79 at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Bluefish

POMATOMUS SALTATRIX

Tissue	Cases Exposure Route	Range	Mean	General Information
7709 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7710 Liver	a) 10 b) 10 c) 10 d) 10 e) 10 f) 10	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 11.3 ug/g b) 168 ug/g c) 558 ug/g d) 13.0+/-5.7 ug/g e) 69.3+/-38.6 ug/g f) 356+/-200 ug/g Dry wt	a) Collected from Christianson's Pond, unpolluted site, 5/81 b) From cooling system intake, H.B. Robinson Steam Plant, intermediate Cu levels, 5/81 c) From near effluent discharge, high Cu levels, 5/81 d) Same as a) except 11/81 e) Same as b) except 11/81 f) Same as c) except 11/81 Pooled samples. Also studied lab and field exposures. South Carolina, Florence AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; COPPER; LIVER; MUSCLES; SOUTH CAROLINA; WATER POLLUTION Harrison, F.L.; Lam, J.R. 1986 Environmental Health Perspectives 65:125-132				

Tissue	Cases Exposure Route	Range	Mean	General Information
7711 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Tissue	Cases Exposure Route	Range	Mean	General Information
7712 Muscle	a) 11 b) 37 c) 42	a) Not given b) Not given c) Not given	a) 1.51+/-0.26 ug/g b) 2.35+/-0.44 ug/g c) 2.16+/-0.37 ug/g Dry wt	a) Collected from Christianson's Pond, unpolluted site b) From cooling system intake, H.B. Robinson Steam Plant, intermediate Cu levels c) From near effluent discharge, high Cu levels Collected 5/81. Also studied lab and field exposure. South Carolina, Florence AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; COPPER; LIVER; MUSCLES; SOUTH CAROLINA; WATER POLLUTION Harrison, F.L.; Lam, J.R. 1986 Environmental Health Perspectives 65:125-132				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Boar
SUS SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
7713 Liver	5	2.25-4.73 ppm Wet wt	3.82 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7714 Muscle	5	2.95-3.45 ppm Wet wt	3.11 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
7715 Body		a) 57-59 ug/g b) 41-43 ug/g c) 50-46 ug/g d) 49-62 ug/g e) 56-59 ug/g f) 51-59 ug/g g) 47-56 ug/g h) 44-76 ug/g Ash wt	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicabl	a) Exposed 3 mo to Cd, then EDTA for 30 d b) Same, EDTA for 60 d c) Same, EDTA for 90 d d) Controls, exposed 3 mo to Cd, then water for 30 d e) Same, water for 60 d f) Same, water for 90 d g) Cd-exposed, 30 d, no treatment after exposure h) Cd-exposed entire time, 3 mo+90 d Excludes viscera and gills. First value in each range is from animals exposed to Cd at 0.01 ppm, second is from those exposed to 0.05 ppm. Values were 31, 32, 18 ug/g for tap water controls, animals at start, unexposed animals given EDTA only, respectively. Japan AAS
7716 Gills		a) 98-145 ug/g b) 87-86 ug/g c) 65-95 ug/g d) 119-120 ug/g e) 104-113 ug/g f) 86-101 ug/g g) 130-116 ug/g h) 58-210 ug/g Ash wt	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicabl	a) Exposed 3 mo to Cd, then EDTA for 30 d b) Same, EDTA for 60 d c) Same, EdTA for 90 d d) Controls, exposed 3 mo to Cd, then water for 30 d e) Same, water for 60 d f) Same, water for 90 d g) Cd-exposed, 30 d, no treatment after exposure h) Cd-exposed entire time, 3 mo+90 d First value in each range is from animals exposed to Cd at 0.01 ppm, second is from those exposed to 0.05 ppm. Values were 58, 40, 57 ug/g for tap water controls, animals at start, unexposed animals given EDTA only, respectively. Japan AAS
7717 Viscera		a) 160-253 ug/g b) 151-278 ug/g c) 139-173 ug/g d) 255-305 ug/g e) 217-264 ug/g f) 184-190 ug/g g) 219-353 ug/g h) 270-498 ug/g Ash wt	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicabl	a) Exposed 3 mo to Cd, then EDTA for 30 d b) Same, EDTA for 60 d c) Same, EdTA for 90 d d) Controls, exposed 3 mo to Cd, then water for 30 d e) Same, water for 60 d f) Same, water for 90 d g) Cd-exposed, 30 d, no treatment after exposure h) Cd-exposed entire time, 3 mo+90 d First value in each range is from animals exposed to Cd at 0.01 ppm, second is from those exposed to 0.05 ppm. Values were 117, 83, 87 ug/g for tap water controls, animals at start, unexposed animals given EDTA only, respectively. Japan AAS

DELIBERATE EXPOSURE; FISHES; AQUATIC; GILLS; VISCERA; BODY; CADMIUM; COPPER; ZINC; METALS; WATER POLLUTION; JAPAN; CHELATING AGENTS

Muramoto, S. 1982 Journal of Environmental Science and Health A17(1):67-74

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cat

Tissue	Cases Exposure Route	Range	Mean	General Information
7718 Hair	a) 26 b) 12 c) 10	a) 6-13 ug/g b) 8-17 ug/g c) 5-20 ug/g	a) 10 ug/g b) 13 ug/g c) 12 ug/g	a) Cats from Tokyo, Japan b) From Philippines c) From Norway Domestic animals, part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS *Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218*				

Catbird
DUMETELLA CAROLINENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7719 Body	a) 2 b) 1	a) 5.2-10 mg/kg b) Not applicable Dry wt	a) 7.6 mg/kg b) 7.3 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Catfish
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7720 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7721 Blood	a) 78 b) 18 Ingestion	a) Not given b) Not given	a) 1.0 ug/g b) 1.0 ug/g Wet wt	a) Treatment group b) Controls Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago. Controls grazed on untreated pastures 16 km from experimental herd. Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7722 Blood	a) 9 b) 2 Ingestion	a) Not given b) Not given	a) 61.167 ug/100 ml b) 69.500 ug/100 ml	a) Sludge farms b) Control farms Cows on farms approximately 28 mo. Sludge farms received at least 2 annual applications. Detection limit 2.3 ug/100 ml. Ohio, Medina and Franklin-Pickaway Counties AAS

OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE

Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376

Tissue	Cases Exposure Route	Range	Mean	General Information
7723 Blood, serum	607	0.1->1.6 ppm	0.73+/-0.31 ppm	Mineral profile, 1981-1983. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7724 Bone	85 Ingestion	a) 0.01-2.0 ug/g b) 0.34-2.4 ug/g c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given Dry wt	a) Not given b) Not given c) 3 ug/g d) 2 ug/g e) 3 ug/g f) 3 ug/g g) 4 ug/g h) 3 ug/g Dry wt	a) 1-4 mo old calves. Mothers grazing in untreated (control) pastures <= 6 yr, 6 cases b) 1-4 mo old calves, mothers grazing in pasture treated with anaerobically digested wastewater sludge (exposed), 9 cases c) 8-9 mo old calves, control mothers, 35 cases d) 8-9 mo old calves, exposed mothers, 70 cases e) Rib from 3 mo old calves, control mothers, 5 cases f) Rib from same calves at 15 mo g) Rib from 3 mo old calves, exposed mothers, 10 cases h) Rib from same calves at 15 mo.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7725 Bone	a) 62 b) 17 Ingestion	a) Not given b) Not given	a) 1.5 ug/g b) 1.2 ug/g Dry wt	a) Treatment group b) Controls Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago. Controls grazed on untreated pastures 16 km from experimental herd. Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7726 Brain	a) 58 b) 26 Ingestion	a) Not given b) Not given	a) 9 ug/g b) 8 ug/g Dry wt	a) 8-9 mo old calves, mothers grazing in untreated pasture b) 8-9 mo old calves, mothers grazing in pastures treated with anaerobically digested wastewater sludges Grazing <= 6 yr in given pasture.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7727 Brain	a) 59 b) 24 Ingestion	a) Not given b) Not given	a) 12 ug/g b) 10 ug/g Dry wt	a) Treatment group b) Controls Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago. Controls grazed on untreated pastures 16 km from experimental herd. Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7728 Brain	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.83 ug/g b) 1.66 ug/g c) 1.49 ug/g d) 1.74 ug/g e) Not detected f) Not detected	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis, no Chelex separation b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis, no Chelex separation c) Same as a) except inductively coupled plasma analysis, Chelex separation d) Same as a) except inductively coupled plasma analysis, Chelex separation e) Same as a) except neutron activation analysis f) Same as b) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP; NA

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle

BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7729 Diaphragm	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 Ingestion	a) Not given b) Not given c) 2.5-6.0 ug/g d) 3.0-6.2 ug/g e) Not given f) Not given Dry wt	a) 5 ug/g b) 9 ug/g c) Not given d) Not given e) 5 ug/g f) 5 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures </= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers.

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7730 Diaphragm	a) 63 b) 29 Ingestion	a) Not given b) Not given	a) 5 ug/g b) 5 ug/g Dry wt	a) Treatment group b) Controls Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago. Controls grazed on untreated pastures 16 km from experimental herd. Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7731 Hair	Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 6.183 ug/g b) 4.483 ug/g c) 6.716 ug/g d) 5.781 ug/g	a) Pre-sludge b) Post-sludge c) Control, "pre-sludge" d) Control, "post-sludge" Each value a mean of 48 calves from 4 farms over 3 yr from 1978-82. Duration of post-sludge phases was 3-8 mo. Control periods approx equal to sludge farm ones. Sludge treatment 2-10 metric tons/hectare, total applied 733 mg/kg. Detection limit 0.29 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS

OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE

Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7732 Heart	a) 5 b) 10 c) 6 d) 9 e) 34 f) 68 Ingestion	a) Not given b) Not given c) 11.1-19.4 ug/g d) 11.8-15.8 ug/g e) Not given f) Not given Dry wt	a) 7 ug/g b) 12 ug/g c) Not given d) Not given e) 15 ug/g f) 15 ug/g Dry wt	a) 4-5 mo old *fetuses*. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers.
DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168				

Tissue	Cases Exposure Route	Range	Mean	General Information
7733 Heart	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 15 ug/g b) 15 ug/g Dry wt	a) Treatment group b) Controls Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago. Controls grazed on untreated pastures 16 km from experimental herd. Illinois AAS
DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707				

Tissue	Cases Exposure Route	Range	Mean	General Information
7734 Kidney	90	2.6->18 ppm	5.19+/-6.51 mg/kg Wet wt	Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES
BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7735 Kidney	a) 5 b) 10 c) 6 d) 9 e) 35 f) 68 g) 5 h) 10 i) 5 j) 10 Ingestion	a) Not given b) Not given c) 12.8-20.0 ug/g d) 10.0-18.4 ug/g e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given Dry wt	a) 9 ug/g b) 10 ug/g c) Not given d) Not given e) 18 ug/g f) 18 ug/g g) 15 ug/g h) 14 ug/g i) 16 ug/g j) 17 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (*exposed*) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, *exposed mothers* g) At weaning (9 mo), mothers in control pastures h) Mothers in exposed pastures i) 150 d after weaning. Fed regular diet. From mothers in control pastures j) Same as i) *except mothers in exposed pastures.*

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7736 Kidney	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 19 ug/g b) 19 ug/g Dry wt	a) Treatment group b) Controls Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago. Controls grazed on untreated pastures 16 km from experimental herd. Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7737 Kidney	1 Ingestion	Not applicable	21.0 ug/g Wet wt	Hereford X Angus which had died after licking wood ashes containing 3219 ug/g. Tissue levels normal. Role of Cu in death unknown. AAS

LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; AUTOPSIES; METAL POISONING; ARSENIC; COPPER; CHROMIUM; ACCIDENTAL POISONING

Thatcher, C.D.; Meldrum, J.B.; Wikse, S.E.; Whittier, W.D. 1985 Journal of the American Veterinary Medical Association 187(2):179-182

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7738 Kidney	a) 36 b) 36 Ingestion	a) Not given b) Not given	a) 3.612 ug/g b) 3.959 ug/g	a) After 30-day waiting period, calves grazed on sewage sludge-treated pasture (2-10 metric tons/hectare, mean applied in 1978-82 was 733 mg/kg) b) Calves grazed on control, untreated pasture Detection limit 0.05 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS
OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376				

Tissue	Cases Exposure Route	Range	Mean	General Information
7739 Kidney	Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 15.8 ug/g b) 16.1 ug/g c) 23 ug/g d) 21 ug/g e) 17 ug/g f) 15 ug/g g) 17 ug/g h) 15 ug/g i) 17 ug/g j) 19 ug/g k) 16 ug/g l) 16 ug/g Dry wt	a) Controls, range cattle b) Cattle grazed at sludge disposal site (abandoned Lowry Bombing Range) c) Young feed-lot steers, controls for d), fed no sludge d) Fed 3 mo with 12% Ft Collins sludge in diet e) Controls for f) f) As in d), Metro Denver sludge g) Control cows for h-i), fed no sludge h) Cows fed 9 mo with 12% Ft Collins sludge in diet i) As in h) plus 4-mo withdrawal j) Control steers for k-l) k) Steers, same as h) l) As in k) plus 4-mo withdrawal Data on soil samples, forages included. Colorado
CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; LIVER; KIDNEYS; CADMIUM; COPPER; ZINC; LEAD; IRON; DIETS; ANIMAL FEEDS; SEWAGE SLUDGE Baxter, J.C.; Johnson, D.; Burge, W.D.; Kienholz, E.; Cramer, W.N. 1983 EPA Report Number EPA-600/S2-83-012				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7740 Kidney	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 4.74 ug/g b) 3.54 ug/g c) 4.31 ug/g d) 3.93 ug/g e) 5 ug/g f) 5 ug/g Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis, no Chelex separation b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis, no Chelex separation c) Same as a) except inductively coupled plasma analysis, Chelex separation d) Same as a) except inductively coupled plasma analysis, Chelex separation e) Same as a) except neutron activation analysis f) Same as b) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP; NA

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Tissue	Cases Exposure Route	Range	Mean	General Information
7741 Liver	229	4-185 ppm	54.9+/-46.3 mg/kg Wet wt	Mineral profile, 1981-1983. Tissue referred to lab for necropsy exam. Several breeds, age 0->6 yr. ICP-AES

BLOOD SERUM; LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ADULTS; JUVENILES; MEASUREMENT METHODS; CALCIUM; CADMIUM; COPPER; IRON; MAGNESIUM; MANGANESE; MOLYBDENUM; PHOSPHORUS; POTASSIUM; SODIUM; ZINC; ALUMINUM; ARSENIC; CHROMIUM; LEAD; BIOCONCENTRATION

Stowe, H.D.; Braselton, W.E.; Kaneene, J.B.; Slanker, M. 1985 American Journal of Veterinary Research 46(3):561-565

Tissue	Cases Exposure Route	Range	Mean	General Information
7742 Liver				

LIVER; RUMEN; ABOMASUM; STOMACH; ENVIRONMENTAL EXPOSURE; CATTLE; TERRESTRIAL; CANADA; BORON; BIOACCUMULATION; ACCIDENTAL POISONING

Brockman, R.P.; Audette, R.J.; Gray, M. 1985 Canadian Veterinary Journal 26:147

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle

BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7743 Liver	a) 5 b) 10 c) 6 d) 9 e) 34 f) 68 g) 5 h) 10 i) 5 j) 10 k) 5 l) 10 Ingestion	a) Not given b) Not given c) 15.9-142.0 ug/g d) 60.3-109.0 ug/g e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given Dry wt	a) 227 ug/g b) 319 ug/g c) Not given d) Not given e) 93 ug/g f) 103 ug/g g) 65 ug/g h) 81 ug/g i) 140 ug/g j) 101 ug/g k) 89 ug/g l) 137 ug/g Dry wt	a) 4-5 mo old fetuses. Mothers grazing in untreated (control) pastures <= 6 yr b) 4-5 mo old fetuses. Mothers grazing in pasture treated with anaerobically digested wastewater sludges (exposed) c) 1-4 mo old calves, control mothers d) 1-4 mo old calves, exposed mothers e) 8-9 mo old calves, control mothers f) 8-9 mo old calves, exposed mothers g) At weaning (9 mo), mothers in control pastures h) Mothers in exposed pastures i) 150 d after weaning. Fed regular diet. From mothers in control pastures j) Same as i) except mothers in exposed pastures k) Mothers of a) l) Mothers of b).

DIAPHRAGM; HEART; LIVER; KIDNEYS; BONES; BRAIN; COPPER; ZINC; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; FETUS; JUVENILES; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; LACTATION

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(1):165-168

Tissue	Cases Exposure Route	Range	Mean	General Information
7744 Liver	a) 64 b) 28 Ingestion	a) Not given b) Not given	a) 162 ug/g b) 78 ug/g Dry wt	a) Treatment group b) Controls Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago. Controls grazed on untreated pastures 16 km from experimental herd. Illinois AAS

DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS

Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707

Tissue	Cases Exposure Route	Range	Mean	General Information
7745 Liver	1 Ingestion	Not applicable	14.3 ug/g Wet wt	Hereford X Angus which had died after licking wood ashes containing 3219 ug/g. Tissue levels normal. Role of Cu in death unknown. AAS

LIVER; KIDNEYS; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; AUTOPSIES; METAL POISONING; ARSENIC; COPPER; CHROMIUM; ACCIDENTAL POISONING

Thatcher, C.D.; Meldrum, J.B.; Wikse, S.E.; Whittier, W.D. 1985 Journal of the American Veterinary Medical Association 187(2):179-182

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS *sp.*

Tissue	Cases Exposure Route	Range	Mean	General Information
7746 Liver	a) 36 b) 36 Ingestion	a) Not given b) Not given	a) 10.183 ug/g b) 21.117 ug/g	a) After 30-day waiting period, calves grazed on sewage sludge-treated pasture (2-10 metric tons/hectare, mean applied in 1978-82 was 733 mg/kg) b) Calves grazed on control, untreated pasture Detection limit 0.2 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS
OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376				

Tissue	Cases Exposure Route	Range	Mean	General Information
7747 Liver	Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 9.5 ug/g b) 4.6 ug/g c) 127 ug/g d) 113 ug/g e) 124 ug/g f) 240 ug/g Dry wt	a) Controls, range cattle b) Cattle grazed at sludge disposal site (abandoned Lowry Bombing Range) c) Young feed-lot steers, controls for d), fed no sludge d) Fed 3 mo with 12% Ft Collins sludge in diet e) Controls for f) f) As in d), Metro Denver sludge. Colorado
CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; LIVER; KIDNEYS; CADMIUM; COPPER; ZINC; LEAD; IRON; DIETS; ANIMAL FEEDS; SEWAGE SLUDGE Baxter, J.C.; Johnson, D.; Burge, W.D.; Kienholz, E.; Cramer, W.N. 1983 EPA Report Number EPA-600/S2-83-012				

Tissue	Cases Exposure Route	Range	Mean	General Information
7748 Liver	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 38.4 ug/g b) 32.4 ug/g c) 36.2 ug/g d) 179 ug/g e) 164 ug/g f) 164 ug/g Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis, no Chelex separation b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis, no Chelex separation c) Same as a) except inductively coupled plasma analysis, Chelex separation d) Same as a) except inductively coupled plasma analysis, Chelex separation e) Same as a) except neutron activation analysis f) Same as b) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP; NA
DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7749 Milk	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.14 ug/g b) 0.13 ug/g Wet wt	a) Treatment group grazed on pastures variously treated for up to 8 yr with anaerobically digested sludge from Metropolitan Sanitary District of Greater Chicago b) Controls grazed on untreated pastures 16 km from experimental herd. 3-4 yr old Hereford, Angus and Charlois [sic] cows. South Dakota; Illinois AAS
DIAPHRAGM; HEART; LIVER; KIDNEYS; BRAIN; BONES; BLOOD; MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; ILLINOIS; METALS; ZINC; COPPER; CADMIUM; CHROMIUM; NICKEL; LEAD; IRON; BIOACCUMULATION; ANIMAL FEEDS; FOOD CONTAMINATION; FARMS; LAND POLLUTION; SEWAGE; SOILS Fitzgerald, P.R.; Peterson, J.; Lue-Hing, C. 1985 American Journal of Veterinary Research 46(3):703-707				

Tissue	Cases Exposure Route	Range	Mean	General Information
7750 Muscle	a) 36 b) 36 Ingestion	a) Not given b) Not given	a) 0.913 ug/g b) 0.986 ug/g	a) After 30-day waiting period, calves grazed on sewage sludge-treated pasture (2-10 metric tons/hectare, mean applied in 1978-82 was 733 mg/kg) b) Calves grazed on control, untreated pasture Detection limit 0.06 ug/g. Ohio, Medina and Franklin-Pickaway Counties AAS
OHIO; CADMIUM; COPPER; LEAD; ZINC; METALS; CATTLE; KIDNEYS; BLOOD; LIVER; MUSCLES; BONES; HAIR; SEWAGE SLUDGE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE Reddy, C.S.; Dorn, C.R.; Lamphere, D.N.; Powers, J.D. 1985 Environmental Research 38:360-376				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7751 Muscle	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.59 ug/g b) 0.76 ug/g c) 0.58 ug/g d) 0.69 ug/g e) Not detected f) Not detected Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis, no Chelex separation b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis, no Chelex separation c) Same as a) except inductively coupled plasma analysis, Chelex separation d) Same as a) except inductively coupled plasma analysis, Chelex separation e) Same as a) except neutron activation analysis f) Same as b) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP; NA
7752 Spleen	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.76 ug/g b) 1.61 ug/g c) 1.53 ug/g d) 1.20 ug/g e) Not detected f) Not detected Wet wt	a) Controls, fed normal feedlot ration, inductively coupled plasma analysis, no Chelex separation b) Fed feedlot ration amended with 12% municipal sewage sludge, inductively coupled plasma analysis, no Chelex separation c) Same as a) except inductively coupled plasma analysis, Chelex separation d) Same as a) except inductively coupled plasma analysis, Chelex separation e) Same as a) except neutron activation analysis f) Same as b) except neutron activation analysis Fort Collins anaerobically digested sludge. Colorado ICP; NA

DELIBERATE EXPOSURE; TERRESTRIAL; CATTLE; KIDNEYS; LIVER; MUSCLES; SPLEEN; BRAIN; ALUMINUM; CALCIUM; CADMIUM; COPPER; COBALT; CHLORINE; IRON; POTASSIUM; MAGNESIUM; MANGANESE; MOLYBDENUM; SODIUM; NICKEL; PHOSPHORUS; LEAD; RUBIDIUM; ANTIMONY; SELENIUM; VANADIUM; ZINC; INGESTION; MEASUREMENT METHODS; SEWAGE SLUDGE

Boyer, K.W.; Jones, J.W.; Linscott, D.; Wright, S.K.; Stroube, W.; Cunningham, W. 1981 Journal of Toxicology and Environmental Health 8:281-295

Centipede
GEOPHILOMORPHA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7753 Body		Not given	41 mg/kg Dry wt	Collected June-Oct 79 at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Chickadee, Carolina
PARUS CAROLINENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7754 Body	1	Not applicable	7.5 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7755 Kidney	a) 18 b) 18 Ingestion	a) Not given b) Not given	a) 10+/-1.0 ppm b) 9+/-1.0 ppm Dry wt	a) Defined diet, controls b) Same diet plus 20% activated sludge (local wastewater treatment plant, Dan Region) 5 day olds, fed for 3 wk. Each value from duplicate determinations of 3 pools, 6 chicks/pool. Difference not significant. Israel AAS
7756 Liver	a) 18 b) 18 Ingestion	a) Not given b) Not given	a) 10+/-0.5 ppm b) 12+/-0.3 ppm Dry wt	a) Defined diet, controls b) Same diet plus 20% activated sludge (local wastewater treatment plant, Dan Region) 5 day olds, fed for 3 wk. Each value from duplicate determinations of 3 pools, 6 chicks/pool. Difference not significant. Israel AAS
DELIBERATE EXPOSURE; TERRESTRIAL; BIRDS; MAGNESIUM; MANGANESE; IRON; ZINC; COPPER; LEAD; CADMIUM; SEWAGE SLUDGE; BIOACCUMULATION Nachtomi, E.; Lipstein, B.; Iosif, B.; Alumot, E. 1984 Nutrition Reports International 29(3):511-517				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cicada

MAGICICADA REPTENDECIM

Tissue	Cases Exposure Route	Range	Mean	General Information
7757 Body, whole		a) Not given b) Not given	a) 22 mg/kg b) 25 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Clam

RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7758 Body		a) Not given b) Not given	a) 9.9+/-1.5 ppm b) 9.0+/-0.6 ppm Dry wt	Samples collected from entrance of the Chef Menteur Pass Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS
MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158				

Clam (M. balthica)

MACOMA BALTHICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7759 Body	a) 5 b) 6 c) 5 d) 4 e) 3	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 48.2+/-2.3 ug/g b) 9.9+/-1.8 ug/g c) 8.8+/-0.8 ug/g d) 46.1+/-8.0 ug/g e) 16.0+/-2.5 ug/g S.E. Dry wt	a) Mouth of Patapsco River, near Baltimore b) Chester River c) Mouth of Port Tobacco River d) Mid-section of York River e) Between mid-section and mouth of York River Soft tissues, each sample a pool of several clams, collected in fall 1979-81. Chesapeake Bay region
CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Clam (M. lateralis)
MULINEA LATERALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7760 Body	5	Not given	9.5+/-0.4 ug/g S.E. Dry wt	Soft tissues, each sample a pool of several clams, collected in fall 1979-81, southeastern shore. Chesapeake Bay region
CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274				

Clam (R. cuneata)
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7761 Body	a) 5 b) 5 c) 6 d) 4 e) 8 f) 5 g) 6 h) 4 i) 4	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 9.3+/-1.1 ug/g b) 9.5+/-0.4 ug/g c) 13.3+/-0.4 ug/g d) 10.0+/-0.7 ug/g e) 1.2+/-0.4 ug/g f) 21.1+/-0.5 ug/g g) 3.7+/-1.4 ug/g h) 12.3+/-2.1 ug/g i) 11.8+/-0.8 ug/g S.E. Dry wt	a) Lower Choptank River b) Mouth of Port Tobacco River c) Potomac River, downstream from Port Tobacco River d) Mattaponi River e) Pamunky River f) Mid-section of York River g) Mouth of Chickahominy River h) James River, downstream from Chickahominy River i) James River, between Chickahominy River and Norfolk Soft tissue, each sample a pool of several clams, collected in fall 1979-81. Chesapeake Bay region
CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274				

Clam, soft-shelled
MYA ARENARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
7762 Body	a) 7 b) 5	a) Not given b) Not given	a) 16.4+/-1.7 ug/g b) 14.0+/-0.5 ug/g S.E. Dry wt	a) Mouth of Potomac River b) Mouth of James River Soft tissues, each sample a pool of several clams, collected in fall 1979-81. Chesapeake Bay region
CADMIUM; LEAD; COPPER; ZINC; ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; CHESAPEAKE BAY; BODY; BIOLOGICAL MONITORING Di Giulio, R.T.; Scanlon, P.F. 1985 Science of the Total Environment 41:259-274				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
7763 Body	17	0.18-1.7 mg/kg Wet wt	0.48 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY
Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Tissue	Cases Exposure Route	Range	Mean	General Information
7764 Liver		a) 5.4-40 mg/kg b) 10-41 mg/kg c) 6.2-5.4 mg/kg d) 3.1-63 mg/kg e) 1.7-120 m/gkg f) 4.9-49 mg/kg Dry wt	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) From Fladen, 1980, 23.3-27.6 cm long, 191-275 g, 7.43-55.7% fat b) 1981, 25.0-27.5 cm, 185-224 g, 2.33-18.5% fat c) 1982, 23.5-26.9 cm, 168-255 g, 2.79-40.5% fat d) From SE Gotland, 1980, 25.3-35.5 cm, 243-625 g, 2.83-64.1% fat e) 1981, 24.5-33.5 cm, 253-700 g, 262-69.0% fat f) 1982, 24.3-33.5 cm, 193-480 g, 3.03-68.3% fat Concluded metal levels dependent on fat content. Kattegat (south of Fladen); Baltic (southeast of Gotland) AAS

LIVER; COPPER; ZINC; CADMIUM; LEAD; ENVIRONMENTAL EXPOSURE; SWEDEN; METALS; FISHES; AQUATIC; WATER POLLUTION
Grimas, U.; Gothberg, A.; Notter, M.; Olsson, M.; Reutergardh, L. 1985 Ambio 14(3):175-178

Coot, American
FULICA AMERICANA

Tissue	Cases Exposure Route	Range	Mean	General Information
7765 Liver	a) 19 b0 10 c) 79 d) 40	a) 1.6-14 ppm b) 3-6 ppm c) 2.2-36 ppm d) 2.6-14.6 ppm Wet wt	a) 5.2 ppm b) 4.9 ppm c) 8.6 ppm d) 6.4 ppm Wet wt Geometric	a) 1 yr before startup, power plant site b) Control site, same as a) c) Range from 6 mo-2 yr post-startup, power plant site d) Control site, same as c) Values in c), d) Compiled by extractor Significant differences between power plant, control sites at 6 mo post-startup (8.7 and 5.0 ppm, respectively) and 1 yr (9.4 and 5.2 ppm). Study was to determine levels at coal-fired power plant ash pond and control site (Port Mansfield). Pre-startup samples in 3, 10, 11/79 and post-startup samples for 2 yr after 10/80. Detection limits, entire study, 0.1-0.2 ppm. Texas Goliad County, Fannin; Texas, Port Mansfield AAS

ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; FOSSIL FUELED POWER PLANTS; TEXAS; COPPER; ZINC; NICKEL; CADMIUM; MERCURY; MOLYBDENUM; LEAD; ARSENIC; SELENIUM; KIDNEYS; BONES; LIVER
White, D.H.; King, K.A.; Mitchell, C.A.; Mulhern, B.M. 1986 Bulletin of Environmental Contamination and Toxicology 36:376-383

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Copepod

Tissue	Cases Exposure Route	Range	Mean	General Information
7766 Body				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Crab
CANCER PAGURUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7767 Hepatopancreas	Injection	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 289 ppm b) 252 ppm c) 366 ppm d) 208 ppm Wet wt	a) 1 wk after 3 doses of 5 mg/kg/wk b) 2 wk after third dose c) 3 wk after d) 17 wk after Intramuscular injection of copper sulfate in 1.1% sodium chloride. Metallothioneins isolated and analysed for Cu and Cd in these animals, and in another group pretreated with cadmium. United Kingdom, Scotland, Aberdeen AAS
HEPATOPANCREAS; AQUATIC; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; COPPER; CADMIUM; ZINC; BIOACCUMULATION; MINERAL METABOLISM; CRABS; CRUSTACEANS Overnell, J. 1982 Comparative Biochemistry and Physiology 73 B(3):555-564				

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7768 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Crayfish

ASTACUS FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7769 Hepatopancreas		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given m) Not given	a) 44 ug/g b) 53 ug/g c) 184 ug/g d) 210 ug/g e) 186 ug/g f) 134 ug/g g) 145 ug/g h) 177 ug/g i) 156 ug/g j) 160 ug/g k) 215 ug/g l) 53 ug/g m) 53.1+/-12.8 ug/g (S.E.) Wet wt	a) Northern site, Lake Oren b) Southern site c) Northern site, Lake Risten d) Middle site e) Southern site f) Northern site, Lake Borken g) Southern site h) Northern site, Lake Sakern i) Middle site j) Southern site k) Lake Yxningen l) Lake Kvarnsjon m) Controls 3-5 animals/value, 9 control animals d, e) calculated by extractor. All lakes receive leached metals from waste tips at old copper mine in Bersbo. Sweden, Bersbo area AAS
CADMIUM; ZINC; COPPER; CRAYFISH; HEPATOPANCREAS; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MINING; SWEDEN; AQUATIC; INSECTS; LARVAE Lundholm, C.E.; Andersson, L. 1985 Ambio 14(3):167-172				

Deer, fallow

DAMA DAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7770 Liver	8	2.46-53.53 ppm Wet wt	9.70 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilised sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7771 Muscle	8	1.15-31.16 ppm Wet wt	4.99 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilised sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Deer, mule
ODOCOILEUS HEMIONUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7772 Hair	20	2.4-10.5 mg/kg	6.4+/-2.0 mg/kg	Specimens (5-10 g) collected 10/81 from dorsal part of neck. 1.5-6.5-yr-old deer from herd with low fawning rate. Although levels were low compared to those reported for Alaskan Moose and domestic cattle, there were no clinical signs of deficiency. Idaho, Council AAS

DEER; HAIR; COPPER; MANGANESE; ENVIRONMENTAL EXPOSURE; TERRESTRIAL; IDAHO; NUTRITIONAL DEFICIENCIES
Dunbar, M.R.; Foreyt, W.J. 1985 Journal of the American Veterinary Medical Association 187(11):1180

Deer, red
CERVUS ELAPHUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7773 Liver	8	0.74-28.56 ppm Wet wt	2.64 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7774 Muscle	8	1.36-3.91 ppm Wet wt	2.57 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION
Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Deer, white-tailed

ODOCOILEUS VIRGINIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7775 Brain	a) 5 b) 10 c) 5	a) Not given b) Not given c) Not given	a) 8.2 ppm b) 7.8 ppm c) 9.6 ppm Dry wt	a) Collected <8 km from zinc smelter b) Collected 10-20 km from smelter c) Collected >100 km from smelter Pennsylvania, Palmerton ICP-AES
7776 Kidney	a) 4 b) 9 c) 5	a) Not given b) Not given c) Not given	a) 18.2 ppm b) 20.6 ppm c) 18.2 ppm Dry wt	a) Collected <8 km from zinc smelter b) Collected 10-20 km from smelter c) Collected >100 km from smelter Pennsylvania, Palmerton ICP-AES
7777 Liver	a) 4 b) 13 c) 5	a) Not given b) Not given c) Not given	a) 190 ppm b) 82 ppm c) 106 ppm Dry wt	a) Collected <8 km from zinc smelter b) Collected 10-20 km from smelter c) Collected >100 km from smelter Pennsylvania, Palmerton ICP-AES

DEER; ENVIRONMENTAL EXPOSURE; ZINC; CADMIUM; LEAD; COPPER; BRAIN; TEETH; LIVER; KIDNEYS; BONES; PENNSYLVANIA; SMELTERS; TERRESTRIAL; METAL POISONING; BIOLOGICAL MONITORING

Sileo, L.; Beyer, W.N. 1985 Journal of Wildlife Diseases 21(3):289-296

Dog

Tissue	Cases Exposure Route	Range	Mean	General Information
7778 Hair	a) 24 b) 5	a) 12-69 ug/g b) 8-15 ug/g	a) 36 ug/g b) 11 ug/g	a) Stray dogs b) Beagles Domestic animals, part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS

Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Dolphin, striped

STENELLA COERULEOALBA

Tissue	Cases Exposure Route	Range	Mean	General Information
7779 Adipose	a) 1 b) 1 c) 1	a) 0.46-0.65 ug/g b) 0.27+/-0.30 ug/g c) 0.16+/-0.26 ug/g Wet wt	a) 0.53+/-0.09 ug/g b) 0.29+/-0.01 ug/g c) 0.20+/-0.04 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Samples from melon, front, central and rear segments of blubber. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Mean % moisture was 37.2+/-5.15, 26.7+/-3.41, 28.1+/-5.41, repectively. Japan, Taiji, Kii Peninsula AAS
7780 Adrenal gland	3	a) Not applicable b) Not applicable c) Not applicable	a) 2.06 ug/g b) 3.78 ug/g c) 1.42 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7781 Amniotic fluid	1	Not applicable	0.11 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS
7782 Blood	a) 1 b) 1	a) Not applicable b) Not applicable	a) 1.05 ug/g b) 0.87 ug/g Wet wt	a) Mature male b) Pregnant female Animals, captured 12/78, weighed 145, 163 kg and ages were 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7783 Bone	3	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable j) Not applicable k) Not applicable	a) 0.42 ug/g b) 0.39 ug/g c) 0.41 ug/g d) 0.42 ug/g e) 0.47 ug/g f) 0.89 ug/g g) 0.51 ug/g h) 0.23 ug/g i) 0.52 ug/g j) 0.80 ug/g k) 0.25 ug/g Wet wt	a) Female fetus, skull b) Dorsal vertebra c) Lumbar vertebra d) Caudal vertebra e) Mature male, dosal vertebra f) Lumbar vertebra g) Caudal vertebra h) Pregnant female, skull i) Dorsal vertebra j) Lumbar vertebra k) Caudal vertebra Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, repectively. Japan, Taiji, Kii Peninsula AAS

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7784 Cartilage	3	a) Not applicable b) Not applicable c) Not applicable	a) 0.23 ug/g b) 0.36 ug/g c) 0.43 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Intervertebral discs. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7785 Cerebellum	3	a) Not applicable b) Not applicable c) Not applicable	a) 1.18 ug/g b) 3.32 ug/g c) 2.77 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7786 Cerebrum	3	a) Not applicable b) Not applicable c) Not applicable	a) 1.20 ug/g b) 4.73 ug/g c) 3.16 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7787 Diaphragm	a) 1 b) 1	a) Not applicable b) Not applicable	a) 1.44 ug/g b) 1.65 ug/g Wet wt	a) Female fetus b) Mature male Animals, captured 12/78, weighed 10, 145 kg and ages were 11.6, 16.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7788 Heart	3	a) Not applicable b) Not applicable c) Not applicable	a) 2.13 u/g b) 3.62 ug/g c) 3.18 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7789 Intestine	3	a) Not applicable b) Not applicable c) Not applicable	a) 2.17 ug/g b) 1.69 ug/g c) 1.14 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7790 Kidney	3	a) Not applicable b) Not applicable c) Not applicable	a) 1.29 ug/g b) 3.19 ug/g c) 3.15 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7791 Liver	3	a) Not applicable b) Not applicable c) Not applicable	a) 40.3 ug/g b) 9.31 ug/g c) 8.03 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7792 Lung	3	a) Not applicable b) Not applicable c) Not applicable	a) 0.47 ug/g b) 1.32 ug/g c) 0.80 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7793 Mammary gland	1	Not applicable	1.28 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS
7794 Medulla oblongata	3	a) Not applicable b) Not applicable c) Not applicable	a) 1.72 ug/g b) 3.63 ug/g c) 2.39 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7795 Muscle	a) 1 b) 1 c) 1	a) 0.63-0.94 ug/g b) 1.95-2.20 ug/g c) 2.37-2.48 ug/g Wet wt	a) 0.81+/-0.11 ug/g b) 2.08+/-0.10 ug/g c) 2.42+/-0.04 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Samples of dorsal and ventral sides from front, central and rear segments. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7796 Ovary	1	Not applicable	2.97 ug/g Wet wt	Female fetus, 12/78, wt 10 kg, age 11.6 mo. Japan, Taiji, Kii Peninsula AAS

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7797 Pancreas	3	a) Not applicable b) Not applicable c) Not applicable	a) 1.46 ug/g b) 1.73 ug/g c) 1.45 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7798 Placenta	1	Not applicable	1.51 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS
7799 Skin	3	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 4.14 ug/g b) 6.59 ug/g c) 4.09 ug/g d) 4.03 ug/g e) 1.56 ug/g f) 1.45 ug/g Wet wt	a) Female fetus, black skin b) White skin c) Mature male, black skin d) White skin e) Pregnant female, black skin f) White skin Samples from dorsal (black) and venteral (white) areas posterior to eye. Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7800 Spleen	3	a) Not applicable b) Not applicable c) Not applicable	a) 1.48 ug/g b) 2.03 ug/g c) 2.42 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7801 Stomach	3	a) 0.86-2.09 ug/g b) 1.01-5.59 ug/g c) 0.66-4.66 ug/g Wet wt	a) 1.44 ug/g b) 2.67 ug/g c) 2.07 ug/g Wet wt	a) Female fetus b) Mature male c) Pregnant female Animals, captured 12/78, weighed 10, 145, 163 kg and ages were 11.6, 16.5, 25.5 mo, respectively. Means calculated by extractor from data for 3 samples. Japan, Taiji, Kii Peninsula AAS
7802 Testis	1	Not applicable	1.08 ug/g Wet wt	Mature male, 12/78, wt 145 kg, age 16.5 mo. Japan, Taiji, Kii Peninsula AAS
7803 Umbilical cord	1	Not applicable	0.58 ug/g Wet wt	Pregnant female, 12/78, wt 163 kg, age 25.5 mo. Japan, Taiji, Kii Peninsula AAS

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Dolphin, striped
STENELLA COERULEOALBA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7804 Uterus	a) 1 b) 1	a) Not applicable b) Not applicable	a) 2.68 ug/g b) 1.09 ug/g Wet wt	a) Female fetus b) Preganat female Animals, captured 12/78, weighed 10 and 163 kg and ages were 11.6, 25.0 mo, respectively. Japan, Taiji, Kii Peninsula AAS
7805 Vagina	a) 1 b) 1	a) Not applicable b) Not applicable	a) 1.29 ug/g b) 1.79 ug/g Wet wt	a) Female fetus b) Preganat female Animals, captured 12/78, weighed 10 and 163 kg and ages were 11.6, 25.0 mo, respectively. Japan, Taiji, Kii Peninsula AAS
ENVIRONMENTAL EXPOSURE; DOLPHINS; AQUATIC; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; CALCIUM; METALS; WATER POLLUTION; MUSCLES; BONES; ADIPOSE TISSUE; LIVER; SKIN; STOMACH; INTESTINES; PANCREAS; ADRENAL GLANDS; HEART; SPLEEN; BLOOD; LUNGS; KIDNEYS; DIAPHRAGM; BRAIN; OVARIES; TESTES; PLACENTA; VAGINA; AMNIOTIC FLUID; UMBILICAL CORD; MAMMARY GLANDS; UTERUS; AGE; FETUS; ADULTS; JAPAN Honda, K.; Tatsukawa, R.; Fujiyama, T. 1982 Agricultural and Biological Chemistry 46(12):3011-3021				

Duck, mottled
ANAS FULVIGULA

Tissue	Cases Exposure Route	Range	Mean	General Information
7806 Bone	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 0.7+/-0.1 mg/kg b) 1.4+/-0.2 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.05$). Texas, Chambers County ES
7807 Feathers	a) 16 b) 5 Ingestion	a) Not given b) Not given	a) 9.3+/-0.6 mg/kg b) 11.1+/-1.3 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.001$). Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Earthworm

Tissue	Cases Exposure Route	Range	Mean	General Information
7808 Body		a) Not given b) Not given	a) 6.9 mg/g b) 5.9 mg/g Wet wt	a) Controls, field with no sewage sludge conditioning b) Treatment group from field with sewage sludge conditioning, 2-OT/ha since 1976. France, Worben

BODY; EARTHWORMS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FRANCE; POLYCHLORINATED BIPHENYLS; METALS; CADMIUM; ZINC; LEAD; COPPER; CHROMIUM; BIOACCUMULATION; SEWAGE; LAND POLLUTION

Diercxsens, P.; de Weck, D.; Borsinger, N.; Rosset, B.; Tarradellas, J. 1985 Chemosphere 14(5):511-522

Tissue	Cases Exposure Route	Range	Mean	General Information
7809 Body, whole		Not given	88 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Earthworms not observed at Palmerton, 2 km downwind. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Earthworm, red

LUMBRICUS RUBELLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7810 Body	a) 26 b) 18 c) 26	a) 8.94-13.39 ug/g b) 9.26-13.27 ug/g c) 17.09-22.98 ug/g Dry wt	a) 11.40 ug/g b) 10.89 ug/g c) 20.75 ug/g Dry wt	a) Controls b) Field treated with fertiliser c) Field treated with municipal sludge, significantly higher Ranges of means. 4 samplings between 5/26/81 and 7/16/81. Ohio AAS

BODY; EARTHWORMS; TERRESTRIAL; OHIO; ENVIRONMENTAL EXPOSURE; METALS; CADMIUM; COPPER; LEAD; ZINC; BIOACCUMULATION; SOILS; SEWAGE; LAND POLLUTION; DELIBERATE EXPOSURE

Kruse, E.A.; Barrett, G.W. 1985 Environmental Pollution (Series A) 38:235-244

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Eel
ANGUILLA ANGUILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7811 Body	17	0.34-1.8 mg/kg Wet wt	0.91 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Lake IJssel, 1977. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY
Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Eel, American
ANGUILLA ROSTRATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7812 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7813 Body, whole	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.42+/-0.36 ug/g b) 1.89+/-0.44 ug/g c) 2.67+/-0.74 ug/g d) 1.76+/-0.34 ug/g e) 2.77+/-0.31 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 1.93+/-0.67 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION
Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 *Archives of Environmental Contamination and Toxicology* 15:185-197

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7814 Bone	2	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable j) Not applicable	a) 1.60 ug/g b) 1.29 ug/g c) 1.10 ug/g d) 1.06 ug/g e) 0.65 ug/g f) 3.32 ug/g g) 0.59 ug/g h) 1.39 ug/g i) 1.63 ug/g j) 0.76 ug/g Wet wt	a) Chick, sternum b) Humerus c) Cervica vertebrae d) Femur e) Tibia f) Adult, sternum g) Humerus h) Cervical vertebrae i) Femur j) Tibia Chick was 12 d old female, adult was a 2 yr old male. Both captured in 1981. Korea, Chungcheongnando, Cheonan City AAS

BIRDS; ENVIRONMENTAL EXPOSURE; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; MERCURY; MUSCLES; BONES; FEATHERS; BIOACCUMULATION; KOREA; TERRESTRIAL

Honda, K.; Min, B.Y.; Tatsukawa, R. 1985 Bulletin of Environmental Contamination and Toxicology 35:781-789

Tissue	Cases Exposure Route	Range	Mean	General Information
7815 Bone	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.39+/-0.10 ug/g b) 0.77+/-0.15 ug/g c) 0.72+/-0.27 ug/g d) 0.74+/-0.03 ug/g e) 0.79+/-0.13 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 0.75+/-0.16 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7816 Brain	a) 9 b) 6 c) 4 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 2.08+/-0.10 ug/g b) 2.10+/-0.13 ug/g c) 2.01+/-0.15 d) 2.43+/-0.51 ug/g Wet wt	a) 12-24 day old downy young b) 30-40 day old prefledglings c) 55-70 day old fledgling d) 2 yr old adult males Mean for chicks was 2.02+/-0.18 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION

Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 Archives of Environmental Contamination and Toxicology 15:185-197

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7817 Feathers	2	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 1.25 ug/g b) 7.35 ug/g c) 7.50 ug/g d) 7.90 ug/g e) 12.0 ug/g f) 7.50 ug/g Wet wt	a) Chick, coverts b) Adult, remiges c) Coverts d) Abdominal e) Primaries, rachis f) Primaries, barbs Chick was 12 d old female, adult was a 2 yr old male. Both captured in 1981. Korea, Chungcheongnando, Cheonan City AAS
BIRDS; ENVIRONMENTAL EXPOSURE; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; MERCURY; MUSCLES; BONES; FEATHERS; BIOACCUMULATION; KOREA; TERRESTRIAL Honda, K.; Min, B.Y.; Tatsukawa, R. 1985 Bulletin of Environmental Contamination and Toxicology 35:781-789				

Tissue	Cases Exposure Route	Range	Mean	General Information
7818 Feathers	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.35+/-0.10 ug/g b) 2.91+/-0.81 ug/g c) 8.30+/-5.32 ug/g d) 4.78+/-0.32 ug/g e) 10.2+/-1.39 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 4.71+/-3.45 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7819 Kidney	a) 9 b) 6 c) 4 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 1.75+/-0.58 ug/g b) 2.20+/-0.83 ug/g c) 2.70+/-1.10 ug/g d) 2.80+/-0.11 ug/g Wet wt	a) 12-24 day old downy young b) 30-40 day old prefledglings c) 55-70 day old fledgling d) 2 yr old adult males Mean for chicks was 2.37+/-0.55 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7820 Liver	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 6.11+/-0.17 ug/g b) 10.9+/-6.49 ug/g c) 11.0+/-3.74 ug/g d) 3.92+/-0.41 ug/g e) 7.05+/-2.96 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 9.24+/-5.04 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 Archives of Environmental Contamination and Toxicology 15:185-197				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Egret, eastern great white
EGRETTA ALBA MODESTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7821 Muscle	2	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.83 ug/g b) 0.83 ug/g c) 3.72 ug/g d) 1.33 ug/g Wet wt	a) Chick, pectoral muscle b) Femoral muscle c) Adult, pectoral muscle d) Femoral muscle Chick was 12 d old female, adult was a 2 yr old male. Both captured in 1981. Korea, Chungcheongnando, Cheonan City AAS
BIRDS; ENVIRONMENTAL EXPOSURE; IRON; MANGANESE; ZINC; COPPER; LEAD; NICKEL; CADMIUM; MERCURY; MUSCLES; BONES; FEATHERS; BIOACCUMULATION; KOREA; TERRESTRIAL Honda, K.; Min, B.Y.; Tatsukawa, R. 1985 Bulletin of Environmental Contamination and Toxicology 35:781-789				

Tissue	Cases Exposure Route	Range	Mean	General Information
7822 Muscle	a) 6 b) 9 c) 6 d) 4 e) 5	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.61+/-0.02 ug/g b) 1.04+/-0.18 ug/g c) 2.54+/-0.45 ug/g d) 1.64+/-0.69 ug/g e) 2.22+/-0.40 ug/g Wet wt	a) 1-9 day old downy young b) 12-24 day old downy young c) 30-40 day old prefledglings d) 55-70 day old fledgling e) 2 yr old adult males Mean for chicks was 1.44+/-0.75 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
7823 Skin	a) 9 b) 6 c) 4 d) 5	a) Not given b) Not given c) Not given d) Not given	a) 1.51+/-0.66 ug/g b) 4.05+/-1.73 ug/g c) 8.28+/-1.36 ug/g d) 4.07+/-1.30 ug/g Wet wt	a) 12-24 day old downy young b) 30-40 day old prefledglings c) 55-70 day old fledgling d) 2 yr old adult males Mean for chicks was 2.48+/-1.52 ug/g. Collected 4-8/81. Korea, Chungcheongnando, Cheonan City AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; BIRDS; BRAIN; LIVER; KIDNEYS; MUSCLES; SKIN; BONES; FEATHERS; BODY; IRON; NICKEL; MANGANESE; ZINC; COPPER; LEAD; CADMIUM; MERCURY; ADULTS; JUVENILES; KOREA; METALS; BIOACCUMULATION Honda, K.; Min, B.Y.; Tatsukawa, R. 1986 Archives of Environmental Contamination and Toxicology 15:185-197				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
7824 Body, whole	1830-3050	a) 0.29-38.75 ug/g b) 0.25-24.10 ug/g Wet wt	a) 0.86 ug/g b) 0.68 ug/g Geometric mean Wet wt	a) 1978-79 b) 1980-81 Extensive data given for 60 freshwater species at 112 sites. Composite samples of 3-5 fish. Part of National Contaminant Biomonitoring Program. United States AAS

BODY; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; UNITED STATES; COMPARATIVE EVALUATIONS; LEAD; MERCURY; CADMIUM; ARSENIC; SELENIUM; COPPER; ZINC; BIOLOGICAL MONITORING; METALS; WATER POLLUTION

Lowe, T.P.; May, T.W.; Brumbaugh, W.G.; Kane, D.A. 1985 Archives of Environmental Contamination and Toxicology 14:363-388

Tissue	Cases Exposure Route	Range	Mean	General Information
7825 Muscle				Review dealing with quality of data on trace metals in marine samples.

ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS

Topping, G. 1986 Science of the Total Environment 49:9-25

Tissue	Cases Exposure Route	Range	Mean	General Information
7826 Muscle	a) 127 b) 80	a) Not detected-33.4 ug/g b) 0.14-38.1 ug/g	a) 1.66 ug/g b) 1.85 ug/g	a) Collected 1978 b) Collected 1979 Detection limit 0.1 ug/g. Means calculated by extractor. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablity for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Fish (N. chitala)
NYTOPTERUS CHITALA

Tissue	Cases Exposure Route	Range	Mean	General Information
7827 Body	5	0.37-1.02 ug/g	0.67 ug/g	Collected 8/83 from polluted lake. Levels of 26.0 ug/L and 172.70 mg/kg (means) in water and sediment, respectively. Mean calculated by extractor. India, Hyderabad, Lake Husainsagar AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; ZOOPLANKTON; CADMIUM; COPPER; BODY; WATER POLLUTION; INDIA; BIOMAGNIFICATION Prahalad, A.K.; Seenayya, G. 1986 Archives of Environmental Contamination and Toxicology 15:417-425				

Frog, wood
RANA SYLVATICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7828 Body, whole	4	3.4-9.2 mg/kg Dry wt	5.5 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Gadwall
ANAS STREPERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7829 Bone	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 0.9+/-0.3 mg/kg b) 1.1+/-0.2 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7830 Feathers	a) 61 b) 2 Ingestion	a) Not given b) Not given	a) 48.4+/-4.5 mg/kg b) 53.4+/-16.6 mg/kg Dry wt S.E.	a) Without ingested shot b) With of ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:168-172				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7831 Hair	2	4-6 ug/g	5 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218				

Grackle, common
QUISCALUS QUISCULA

Tissue	Cases Exposure Route	Range	Mean	General Information
7832 Body	a) 1 b) 1	a) Not applicable b) Not applicable	a) 7.3 mg/kg b) 8.5 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Grasshopper
CHORTHIPPUS BRUNNEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7833 Body	a) 16 b) 16 c) 16 d) 16 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 18.3+/-1.0 mg/kg b) 20.4+/-1.1 mg/kg c) 46.3+/-2.5 mg/kg d) 14.6+/-1.2 mg/kg S.E. Fresh wt	a) Control diet b) Supplemented with Zn c) Supplemented with Cu d) Supplemented with Cd Feed was ryegrass with normal levels of Zn, Cu, Cd (60, 20, 0.7 mg/kg, respectively). Supplements were 40 mg/kg of diet. Feeding trial over 21 days with daily renewal of food supply. Included data based on sex. United Kingdom, England AAS
DELIBERATE EXPOSURE; GRASSHOPPERS; INSECTS; BODY; CADMIUM; COPPER; ZINC; TERRESTRIAL; METALS; BIOCONCENTRATION Johnson, M.S. 1986 Bulletin of Environmental Contamination and Toxicology 37:234-238				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Grosbeak, rose-breasted

PHEUCTICUS LUDOVICIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7834 Body	2	8.3-10 mg/kg Dry wt	9.15 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Grouse, ruffed

BONASA UMBELLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7835 Feathers	11	3.16-12.0 ug/g Dry wt	5.88+/-0.72 ug/g Dry wt S.E.	Birds shot by hunters during 11/79, 12/79 at sites >100 km from mineral mines/smelters or other sources of industrial pollution. Ages, sexes not known. Ontario, Gogama (McLeod Township) and Manitoulin Island (Robinson and Billings Townships) AAS

COPPER; NICKEL; IRON; FEATHERS; BIRDS; TERRESTRIAL; METALS; ENVIRONMENTAL EXPOSURE; CANADA; BIOLOGICAL MONITORING; BIOACCUMULATION

Parker, G.H. 1985 Bulletin of Environmental Contamination and Toxicology 35:776-780

Grouse, spruce

CANACHITES CANADENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7836 Feathers	14	5.02-8.12 ug/g Dry wt	6.79+/-0.28 ug/g Dry wt S.E.	Birds shot by hunters during 11/79, 12/79 at sites >100 km from mineral mines/smelters or other sources of industrial pollution. Ages, sexes not known. Ontario, Gogama (McLeod Township) and Manitoulin Island (Robinson and Billings Townships) AAS

COPPER; NICKEL; IRON; FEATHERS; BIRDS; TERRESTRIAL; METALS; ENVIRONMENTAL EXPOSURE; CANADA; BIOLOGICAL MONITORING; BIOACCUMULATION

Parker, G.H. 1985 Bulletin of Environmental Contamination and Toxicology 35:776-780

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Guinea pig

Tissue	Cases Exposure Route	Range	Mean	General Information
7837 Hair	10	7.5-15 ug/g	9 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218				

Hamster, golden

Tissue	Cases Exposure Route	Range	Mean	General Information
7838 Hair	5	12-18 ug/g	17 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218				

Hare, brown
LEPUS CAPENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7839 Liver	5	3.20-15.93 ppm Wet wt	5.69 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7840 Muscle	5	2.36-5.12 ppm Wet wt	3.25 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.02 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Hedgehog
ERINACEUS EUROPAEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7841 Liver	5	4.59-6.73 ppm Wet wt	5.63 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilised sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7842 Muscle	5	2.30-4.81 ppm Wet wt	3.02 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilised sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Herring, Baltic
CLUPEA HARENGUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7843 Body	14	0.21-2.4 mg/kg Wet wt	1.0 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Hornet

Tissue	Cases Exposure Route	Range	Mean	General Information
7844 Body		Not given	38 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Insect
SIALIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7845 Body		a) Not given b) Not given c) Not given	a) 50 ug/g b) 21 ug/g c) 10 ug/g Dry wt	a) Contaminated, Lake Gruvsjon b) Contaminated, Lake Batviksgolen c) Control, Lake Hammarsjon Neuropteran larvae, 6-14 animals pooled. Sweden, Bersbo area AAS
CADMIUM; ZINC; COPPER; CRAYFISH; HEPATOPANCREAS; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; MINING; SWEDEN; AQUATIC; INSECTS; LARVAE Lundholm, C.E.; Andersson, L. 1985 Ambio 14(3):167-172				

Tissue	Cases Exposure Route	Range	Mean	General Information
7846 Liver	a) 5 b) 7	a) 12-45 ppm b) 12-46 ppm Dry wt	a) 20.4 ppm b) 19.2 ppm Dry wt Geometric	a) Detected in 5/5 composite samples of aquatic insects collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 7/7 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. California, San Joaquin Valley AAS
BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63				

Killifish
FUNDULUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7847 Body	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 15.7 ug/g b) 19.2 ug/g c) 9.1 ug/g Dry wt	a) Providence Barge, Providence River b) Wickford Tower, Narragansett Bay c) Price Neck, Rhode Island Sound Prey of the common tern collected in 1981 near nesting sites. a) closest to Providence, major area of electroplating industry. Rhode Island AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; FISHES; COPPER; IRON; ZINC; NICKEL; LEAD; CHROMIUM; MAGNESIUM; MANGANESE; BODY; LIVER; WATER POLLUTION; INDUSTRIAL AREAS; INDUSTRIAL POLLUTION; RHODE ISLAND Custer, T.W.; Franson, J.C.; Moore, J.F.; Myers, J.E. 1986 Environmental Pollution (Series A) 41:33-52				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Killifish
FUNDULUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7848 Body, whole				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE Eisler, R. 1984 Biological Trace Element Research 6:165-180				

Lobster

Tissue	Cases Exposure Route	Range	Mean	General Information
7849 Liver				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Lynx, pardel
LYNX PARDINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7850 Liver	5	5.28-10.82 ppm Wet wt	7.56 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7851 Muscle	5	0.93-4.11 ppm Wet wt	1.45 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Millipede
POLYDESMIDA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7852 Body		Not given	160 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 2 km upwind of smelters. Levels much higher than in other litter invertebrates. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Millipedes (unidentified)

Tissue	Cases Exposure Route	Range	Mean	General Information
7853 Body		Not given	150 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Levels much higher than in other litter invertebrates. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Mink
MUSTELA VISON

Tissue	Cases Exposure Route	Range	Mean	General Information
7854 Bone	a) 110 b) 198	a) 0.00-2.78 ug/g b) 0.13-29.74 ug/g Dry wt	a) 1.15+/-0.06 ug/g b) 1.64+/-0.17 ug/g S.E. ry wt	a) 1981-1982 b) 1982-1983 Trapping season. Collected in southwest, central, north, and east Virginia. Limit of detection 0.1 ug/g dry wt. Virginia AAS

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Mink
MUSTELA VISON

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7855 Kidney	a) 108 b) 170	a) 6.65-71.03 ug/g b) 11.08-196.67 ug/g Dry wt	a) 21.02+/-0.97 ug/g b) 31.04+/-1.84 ug/g S.E. Dry wt	a) 1981-1982 b) 1982-1983 Trapping season. Collected in southwest, central, north, and east Virginia. Limit of detection 0.1 ug/g dry wt. Virginia AAS
7856 Liver	a) 125 b) 199	a) 10.84-116.07 ug/g b) 19.17-193.56 ug/g Dry wt	a) 36.71+/-1.76 ug/g b) 34.88+/-1.94 ug/g S.E. Dry wt	a) 1981-1982 b) 1982-1983 Trapping season. Collected in southwest, central, north, and east Virginia. Limit of detection 0.1 ug/g dry wt. Virginia AAS
BONES; KIDNEYS; LIVER; MINKS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; VIRGINIA; METAL POISONING; LEAD POISONING; METALS; LEAD; CADMIUM; COPPER; ZINC; BIOACCUMULATION Ogle, M.C.; Scanlon, P.F.; Kirkpatrick, R.L.; Gwynn, J.V. 1985 Bulletin of Environmental Contamination and Toxicology 35:29-37				

Monkey, crab-eating

Tissue	Cases Exposure Route	Range	Mean	General Information
7857 Hair	1	Not applicable	5 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Mosquitofish
GAMBUSIA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7858 Body	a) 2 b) 4	a) 3.4-3.8 ppm b) 5.2-8.4 ppm Dry wt	a) 3.58 ppm b) 6.76 ppm Dry wt Geometric	a) Detected in 2/2 composite samples collected 5/83 from Volta Wildlife Area, which does not receive agricultural drainage water b) Detected in 4/4 from Kesterson National Wildlife Refuge in Merced Co., 10 km from Volta, in which agricultural drainage water is being used for marsh management Food organisms of aquatic birds. California, San Joaquin Valley AAS

BIRDS; AQUATIC; ENVIRONMENTAL EXPOSURE; SELENIUM; CALIFORNIA; WATER POLLUTION; AGRICULTURE; LIVER; EGGS; WATERFOWL; INSECTS; FISHES; BODY; SELENIUM; SILVER; ARSENIC; BORON; CADMIUM; CHROMIUM; COPPER; MERCURY; MOLYBDENUM; NICKEL; LEAD; ZINC
Ohlendorf, H.M.; Hoffman, D.J.; Saiki, M.K.; Aldrich, T.W. 1986 Science of the Total Environment 52:49-63

Moth
PAONIAS EXCAECATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7859 Body		Not given	9.9 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS
Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Moth (L. unipunctata)
LEUCANIA UNIPUNCTATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7860 Body		a) Not given b) Not given	a) 3.8 mg/kg b) 7.2 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS
Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Moth, eastern tent caterpillar
MALACOSOMA AMERICANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7861 Body		Not given	12 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Moth, gypsy
PORTHETRIA DISPAR

Tissue	Cases Exposure Route	Range	Mean	General Information
7862 Body		a) Not given b) Not given	a) 13 mg/kg b) 13 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Caterpillar, collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Moth, noctuid
NOCTUA NIGRUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7863 Body		a) Not given b) Not given	a) 6.1 mg/kg b) 15 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Moth, pale tiger

HALYSIDOTA TESSELLARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7864 Body		Not given	9.3 mg/kg dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Moth, tiger

Tissue	Cases Exposure Route	Range	Mean	General Information
7865 Body		Not given	6.2 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Genera were HALYSIDOTA and SPILOSOMA sp. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Mouse

Tissue	Cases Exposure Route	Range	Mean	General Information
7866 Hair	4	10-14 ug/g	12 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:215-218				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Mouse, white-footed

PEROMYSCUS LEUCOPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7867 Body	a) 9 b) 9	a) Not given b) Not given	a) 8.3+/-0.3 mg/kg b) 6.7+/-0.3 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Mouse, wood

APODEMUS SYLVATICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7868 Liver	6	6.87-7.64 ppm Wet wt	7.20 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7869 Muscle	6	1.60-20.46 ppm Wet wt	5.72 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Mussel

MYTILUS CALIFORNIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7870 Body	a) 405 b) 630 c) 495 d) 150	a) 10.3+/-0.3-15.6+/-1.0 ug/g b) 8.3+/-0.8-17.0+/-1.9 ug/g c) 8.6+/-1.2-12.7+/-2.2 ug/g d) 4.7+/-0.5-5.7+/-0.6 ug/g Dry wt	a) Not given b) Not given c) Not given d) Not given	a) Transplanted to bay in 1980 b) Transplanted in 1981 c) Transplanted in 1982 d) From intertidal collection site, not transplanted, range over 1980-2 45-65 mm animals transplanted to 16 sites for 4-5.5 mo. Gonads removed before levels measured. California, San Francisco Bay

ENVIRONMENTAL EXPOSURE; DELIBERATE EXPOSURE; MUSSELS; BODY; AQUATIC; WATER POLLUTION; METALS; SILVER; ALUMINUM; CADMIUM; CHROMIUM; COPPER; MERCURY; MANGANESE; LEAD; ZINC; CALIFORNIA

Smith, D.R.; Stephenson, M.D.; Flegal, A.R. 1986 Environmental Toxicology and Chemistry 5:129-138

Mussel, blue

MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7871 Body		a) 2.9-6.2 ug/g b) 5.8-10.6 ug/g Dry wt	a) 4.0 ug/g b) 8.4 ug/g Dry wt	a) Gonadal tissue, range: values at 11/18/80 and 9/4/80 b) Somatic tissue, range: values at 9/1/81 and 7/8/81 All values calculated by extractor from total burdens and wt given in table. Total of 11 collections at uncontaminated site 9/80-9/81. Levels varied with season and reproductive state. Gametogenesis and spawning in 4 and 7/81. Oregon, Newport, Yaquina Bay AAS

ENVIRONMENTAL EXPOSURE; MUSSELS; MOLLUSKS; AQUATIC; BODY; GONADS; MANGANESE; NICKEL; COPPER; ZINC; CADMIUM; ARSENIC; WATER POLLUTION; METALS; OREGON

La Touche, Y.D.; Mix, M.C. 1982 Bulletin of Environmental Contamination and Toxicology 29:665-670

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7872 Body		a) 17.5-29.0 mg/kg b) 15.7-25.8 mg/kg c) 8.9-28.9 mg/kg d) 6.0-14.9 mg/kg e) 4.5-7.1 mg/kg f) 5.0-9.0 mg/kg g) 6.6-14.7 mg/kg h) 5.2-10.1 mg/kg Dry wt	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 1980, April b) October c) 1981, April d) October e) 1982, April f) October g) 1983, April h) October Extremes from sampling locations distributed over the Waddensee, coastal North Sea and Ems' estuaries, Western and Eastern Scheldt. Range of medians was 6.6-13.1 mg/kg. Netherlands AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; MOLLUSKS; MUSSELS; MERCURY; LEAD; CADMIUM; COPPER; ZINC; BODY; METALS; WATER POLLUTION; NETHERLANDS

Luten, J.B.; Bouquet, W.; Burggraaf, M.M.; Rauchbaar, A.B.; Rus, J. 1986 Bulletin of Environmental Contamination and Toxicology 36:770-777

Tissue	Cases Exposure Route	Range	Mean	General Information
7873 Body	20	1.1-4.9 mg/kg Wet wt	2.1 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected from Eastern Scheldt, 1977. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Mussel, blue
MYTILUS EDULIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7874 Body, whole	a) 10 b) 10 c) 10 d) 10 e) 10 f) 10 g) 10 h) 10 i) 10 j) 10	1.0+/-0.37-2.3+/-0.52 ppm Wet wt Range of means	a) 1.1+/-0.10 ppm b) 1.0+/-0.37 ppm c) 2.3+/-0.52 ppm d) 2.2+/-0.48 ppm e) 1.7+/-0.38 ppm f) 1.8+/-0.36 ppm g) 1.9+/-0.54 ppm h) 2.2+/-0.55 ppm i) 1.8+/-0.56 ppm Wet wt	a) Connecticut River b) Hammonasset c) New Haven Harbor d) Milford Harbor e) Housatonic River f) Stratford Point g) Bridgeport h) Norwalk Harbor i) Cos Cob Harbor Collected 9/83. Levels relatively low, no USFDA limit for Cu in seafood for humans. Connecticut AAS
BODY; MUSSELS; AQUATIC; ENVIRONMENTAL EXPOSURE; CONNECTICUT; CADMIUM; COPPER; CHLORINATED HYDROCARBONS; CHLORINE ORGANIC COMPOUNDS; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; WATER POLLUTION Greig, R.A.; Sennefelder, G. 1985 Bulletin of Environmental Contamination and Toxicology 35:331-334				

Tissue	Cases Exposure Route	Range	Mean	General Information
7875 Gills	a) 15 b) 14	6.0-22 ug/g b) 6.0-51 ug/g Dry wt	a) 9.6+/-3.9 ug/g b) 29+/-14 ug/g Dry wt	a) Rocky Point, relatively unpolluted b) Seabus, near outfall of storm water drainage system Both sites in Burrard Inlet. Collections over 12 mo beginning 1/79. Uptake facilitated by Zn and/or Pb uptake. Seasonal variations. Canada, British Columbia X-ray spectrom
7876 Viscera	a) 15 b) 14	a) 8.8-33 ug/g b) 13-48 ug/g Dry wt	a) 16+/-10 ug/g b) 25+/-9 ug/g Wet wt	a) Rocky Point, relatively unpolluted b) Seabus, near outfall of storm water drainage system Both sites in Burrard Inlet. Collections over 12 mo beginning 1/79. Uptake facilitated by Zn and/or Pb uptake. Seasonal variations. Canada, British Columbia X-ray spectrom
ENVIRONMENTAL EXPOSURE; AQUATIC; VISCERA; GILLS; MOLLUSKS; WATER POLLUTION; METALS; LEAD; COPPER; ZINC; IRON; MANGANESE; CANADA Popham, J.D.; D'Auria, J.M. 1982 Archives of Environmental Contamination and Toxicology 11:273-282				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Oriole, orchard
ICTERUS SPURIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7877 Body	1	Not applicable	10 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS
Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Osprey
PANDION HALIAETUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7878 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE
Eisler, R. 1984 Biological Trace Element Research 6:165-180

Otter
LUTRA LUTRA

Tissue	Cases Exposure Route	Range	Mean	General Information
7879 Liver	5	8.22-21.42 ppm Wet wt	13.27 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Otter
LUTRA LUTRA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7880 Muscle	5	3.58-5.16 ppm Wet wt	4.30 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilised sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Ovenbird
SEIURUS AUROCAPILLIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7881 Body	2	8.2-9.2 mg/kg Dry wt	8.7 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Oyster, American

CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7882 Body		a) 13+/-2-22+/-4 mg/kg b) 18.1+/-1-29+/-3 mg/kg c) 10+/-8-22+/-10 mg/kg d) 19+/-0.4-46+/-21 mg/kg e) 9.6+/-0.3-13+/-1 mg/kg f) 13+/-3-27+/-7 mg/kg	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Palmetto Bay Marina, spring, 10 stations b) Summer c) Outdoor Resorts Marina, spring, 8 stations d) Summer e) Fripp Island Marina, spring, 9 stations f) Summer Collected from mid-intertidal portion of reefs. 15 animals/sample. Sampled weekly 3/29-4/4 and 7/26-8/11/83. South Carolina AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; OYSTERS; MOLLUSKS; BODY; CADMIUM; CHROMIUM; COPPER; LEAD; NICKEL; ZINC; METALS; WATER POLLUTION; SOUTH CAROLINA Marcus, J.M.; Thompson, A.M. 1986 Bulletin of Environmental Contamination and Toxicology 36:587-594				

Tissue	Cases Exposure Route	Range	Mean	General Information
7883 Body		Not given	0.6+/-0.2 ppm Dry wt	Samples collected from entrance of the Inner Harbor Navigation Canal at Lake Pontchartrain, 5/80-6/80. Louisiana, Lake Pontchartrain AAS
MOLLUSKS; TRACE ELEMENTS; BODY; ENVIRONMENTAL EXPOSURE; ARSENIC; LOUISIANA; BERYLLIUM; COPPER; CADMIUM; LEAD; MERCURY; NICKEL; THALLIUM; SELENIUM; CHROMIUM; SILVER; ZINC; AQUATIC; COMPARATIVE EVALUATIONS Byrne, C.J.; DeLeon, I.R. 1986 Bulletin of Environmental Contamination and Toxicology 37:151-158				

Oyster, cape

CRASSOSTREA MARGARITACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7884 Body	426 (approx)	0.6+/-0.3-13.8+/-8.9 ug/g Wet wt	Not applicable	Range of means. From survey of metal levels in oysters collected 7/77-8/79 at 25 sites along 500 km of relatively undeveloped coastline from near Mossel Bay to the Port Alfred area. Study provided data for the national marine pollution monitoring program. South Africa, southern coast AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; OYSTERS; BODY; ZINC; CADMIUM; COPPER; LEAD; IRON; MANGANESE; NICKEL; COBALT; CHROMIUM; SOUTH AFRICA; WATER POLLUTION; METALS Watling, H.R.; Watling, R.J. 1982 Bulletin of Environmental Contamination and Toxicology 28:460-466				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Oyster, Pacific
CRASSOSTREA GIGAS

Tissue	Cases Exposure Route	Range	Mean	General Information
7885 Body	a) 328 b) 226	a) 44-254 ug/g b) 110-309 ug/g Wet wt	a) 168 ug/g b) 191.8 ug/g Wet wt	a) Collected live from 8 sites in bay b) Collected from 10 stalls in Lau Fau Shan Market Ranges of means from table means given here calculated by extractor. China, Hong Kong, New Territories (NW), Deep Bay AAS

ENVIRONMENTAL EXPOSURE; BODY; OYSTERS; ARSENIC; CADMIUM; COPPER; LEAD; MERCURY; ZINC; METALS; WATER POLLUTION; CHINA; MOLLUSKS

Phillips, D.J.H.; Ho, C.T.; Ng, L.H. 1982 Archives of Environmental Contamination and Toxicology 11:533-537

Pelican, brown
PELECANUS OCCIDENTALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7886 Feathers	10	Not given	3.99+/-1.43 ppm Dry wt	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.1 ppm wet wt. California AAS
7887 Kidney	10	Not given	10.8+/-3.06 ppm Dry wt	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.1 ppm wet wt. California AAS
7888 Liver	10	Not given	23.5+/-8.94 ppm Dry wt	9 shot in vicinity of Bahia de los Angeles, Gulf of California, on 11/30/80 or 12/1/80. 1 bird found dead at Anacapa Island, CA on 7/28/80. Detection limit=0.1 ppm wet wt. California AAS

ADIPOSE TISSUE; MUSCLES; BODY; LIVER; KIDNEYS; FEATHERS; BONES; PANCREAS; GONADS; PELICANS; AQUATIC; ENVIRONMENTAL EXPOSURE; CALIFORNIA; METAL POISONING; ARSENIC; CADMIUM; CHROMIUM; COPPER; MERCURY; LEAD; SELENIUM; ZINC; DDE; BIOACCUMULATION

Ohlendorf, H.M.; Anderson, D.; Boellstorff, D.E.; Mulhern, B.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:183-192

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Pig, miniature

Tissue	Cases Exposure Route	Range	Mean	General Information
7889 Hair	1	Not applicable	28 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS

Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218

Pike-perch
STIZOSTEDION LUCIOPERCA

Tissue	Cases Exposure Route	Range	Mean	General Information
7890 Body	a) 19 b) 8	a) 0.20-1.8 mg/kg b) 0.20-0.34 mg/kg Wet wt	a) 0.44 mg/kg b) 0.27 mg/kg Wet wt	a) Collected 1977, Lake IJssel b) Collected 1982-84, Hollands Diep Edible parts, mixed samples weighing about 20 kg. Collected from Lake IJssel, 1980-84. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Pintail
ANAS ACUTA

Tissue	Cases Exposure Route	Range	Mean	General Information
7891 Bone	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 1.0 mg/kg b) 1.0+/-0.1 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7892 Feathers	a) 14 b) 4 Ingestion	a) Not given b) Not given	a) 10.4+/-0.2 mg/kg b) 11.7+/-0.4 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS

Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Plaice

PLEURONECTES PLATESSA

Tissue	Cases Exposure Route	Range	Mean	General Information
7893 Body	14	0.21-0.98 mg/kg Wet wt	0.42 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1978-81. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY

Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Ptarmigan, willow

LAGOPUS LAGOPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7894 Feathers	22	4.38-8.12 ug/g Dry wt	5.54+/-0.21 ug/g Dry wt S.E.	Birds shot by hunters during 11/79, 12/79 at sites >100 km from mineral mines/smelters or other sources of industrial pollution. Ages, sexes not known. Quebec, near Great Whale River AAS

COPPER; NICKEL; IRON; FEATHERS; BIRDS; TERRESTRIAL; METALS; ENVIRONMENTAL EXPOSURE; CANADA; BIOLOGICAL MONITORING; BIOACCUMULATION

Parker, G.H. 1985 Bulletin of Environmental Contamination and Toxicology 35:776-780

Rabbit

Tissue	Cases Exposure Route	Range	Mean	General Information
7895 Hair	6	8-19 ug/g	16 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS

Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C
Rabbit

Tissue	Cases Exposure Route	Range	Mean	General Information
7896 Heart	a) 8 b) 8 Ingestion	a) Not given b) Not given	a) 3.9+/-0.4 ug/g b) 3.8+/-0.8 ug/g S.E. Wet wt	a) Controls, unexposed b) Received 20 ug/ml Ca as Cd-Cl2 in drinking water for 9 mo. Evaluation of mechanisms which regulate cardiovascular homeostasis. Male New Zealand rabbits, 3 mo old. Specific, multiple effects on cardiovascular system. AAS
7897 Kidney	a) 8 b) 8 Ingestion	a) Not given b) Not given	a) 2.9+/-0.1 ug/g b) 3.1+/-0.2 ug/g S.E. Wet wt	a) Controls, unexposed b) Received 20 ug/ml Ca as Cd-Cl2 in drinking water for 9 mo. Evaluation of mechanisms which regulate cardiovascular homeostasis. Male New Zealand rabbits, 3 mo old. Specific, multiple effects on cardiovascular system. AAS

DELIBERATE EXPOSURE; CADMIUM; ZINC; COPPER; INGESTION; KIDNEYS; HEART; CARDIAC EFFECTS; HYPERTENSION; CARDIOVASCULAR EFFECTS; RABBITS

Boscolo, P.; Carmignani, M. 1986 British Journal of Industrial Medicine 43:605-610

Tissue	Cases Exposure Route	Range	Mean	General Information
7898 Liver	5	5.14-6.46 ppm Wet wt	5.76 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7899 Muscle	5	0.68-1.86 ppm Wet wt	1.08 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Rat

Tissue	Cases Exposure Route	Range	Mean	General Information
7900 Hair	2	17-18 ug/g	17.5 ug/g	Domestic animals, Part of study dealing with characteristics of metal accumulation in fur of domestic and experimental animals. Values estimated from graph.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; HAIR; COPPER; IRON; MERCURY; ZINC; MANGANESE; CATS; DOGS; GUINEA PIGS; HAMSTERS; RATS; MICE; RABBITS; GOATS; PIGS; MONKEYS; NORWAY; JAPAN; PHILIPPINES; BIOLOGICAL MONITORING; BIOACCUMULATION; METALS Doi, R.; Nakaya, K.; Ohno, H.; Yamashita, K.; Kobayashi, T.; Kasai, S. 1986 Bulletin of Environmental Contamination and Toxicology 37:213-218				

Rat, brown
RATTUS NORVERGICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7901 Liver	5	5.07-5.18 ppm Wet wt	5.12 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilised sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
7902 Muscle	5	1.78-2.84 ppm Wet wt	2.25 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilised sands of Donana National Park. Detection limit 0.002 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Robin, American
TURDUS MIGRATORIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7903 Body	6	7.3-9.6 mg/kg Dry wt	Not given	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Salamander, red-backed
PLETHODON CINEREUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7904 Body, whole	a) 6 b) 1	a) Not given b) Not applicable	a) 6.4 mg/kg b) 4.6 mg/kg Dry wt	a) Pooled specimens b) Single specimen Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Salamander, slimy
PLETHODON GLUTINOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7905 Body, whole	a) 2 b) 2	a) Not given b) 3.2-3.4 mg/kg Dry wt	a) 5.0 mg/kg b) 3.3 mg/kg Dry wt	a) Pooled specimens b) Analyzed individually Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Scallop
PLACOPECTEN MAGELLANICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7906 Gills	38	Not given	8.0 ug/g Dry wt	From Georges Bank, Browns Bank, and off Navy Island near St. Andrews. Size 70-126 mm. Canada, New Brunswick AAS
7907 Mantle	38	Not given	3.7 ug/g Dry wt	From Georges Bank, Browns Bank, and off Navy Island near St. Andrews. Size 70-126 mm. Canada, New Brunswick AAS

(next page)

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Scallop

PLACOPECTEN MAGELLANICUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7908 Muscle	38	Not given	2.9 ug/g Dry wt	From Georges Bank, Browns Bank, and off Navy Island near St. Andrews. Size 70-126 mm. Canada, New Brunswick AAS
MUSCLES; GILLS; MANTLE; VISCERA; SCALLOPS; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; COPPER; CADMIUM; LEAD; ZINC; BIOCONCENTRATION Ray, S.; Woodside, M.; Jerome, V.E.; Akagi, H. 1984 Chemosphere 13(11):1247-1254				

Tissue	Cases Exposure Route	Range	Mean	General Information
7909 Muscle				Review dealing with quality of data on trace metals in marine samples.
ENVIRONMENTAL EXPOSURE; AQUATIC; REVIEW; FISHES; LOBSTERS; CRUSTACEANS; MOLLUSKS; SCALLOPS; COPEPODS; MUSCLES; LIVER; BODY; COPPER; ZINC; MERCURY; CADMIUM; LEAD; ARSENIC; METALS; WATER POLLUTION; MEASUREMENT METHODS; TRACE ELEMENTS Topping, G. 1986 Science of the Total Environment 49:9-25				

Tissue	Cases Exposure Route	Range	Mean	General Information
7910 Viscera	38	a) Not given b) Not given c) Not given d) Not given	a) 29.1 ug/g b) 63 ug/g c) 11 ug/g d) 12 ug/g Dry wt	a) All sites b) Browns Bank c) Off Navy Island d) Georges Bank Size 70-126 mm. Canada, New Brunswick AAS
MUSCLES; GILLS; MANTLE; VISCERA; SCALLOPS; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; COPPER; CADMIUM; LEAD; ZINC; BIOCONCENTRATION Ray, S.; Woodside, M.; Jerome, V.E.; Akagi, H. 1984 Chemosphere 13(11):1247-1254				

Scaup, lesser

AYTHYA AFFINIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7911 Bone	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 2.6+/-0.7 mg/kg b) 13.3+/-6.6 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Scaup, lesser
AYTHYA AFFINIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7912 Feathers	a) 32 b) 17 Ingestion	a) Not given b) Not given	a) 11.2+/-0.9 mg/kg b) 13.5+/-1.6 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, P.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:168-172				

Seal, harbor
PHOCA VITULINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7913 Brain				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.
REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE Eisler, R. 1984 Biological Trace Element Research 6:165-180				

Tissue	Cases Exposure Route	Range	Mean	General Information
7914 Kidney	15	4.62-10.40 ug/g Wet wt	6.33+/-1.69 ug/g Wet wt	Collected 4/10/84 in ice drift area. Males and females, body length mean of 129+/-19 cm, range 90-152 cm. Japan, Hokkaido, Monbetsu City, Okhotsk Sea ICP-AES
ENVIRONMENTAL EXPOSURE; AQUATIC; SEALS; JAPAN; LIVER; KIDNEYS; METALS; CADMIUM; COPPER; ZINC; MERCURY; METALLOTHIONEIN; AGE Tohyama, C.; Himeno, S.-I.; Watanabe, C.; Suzuki, T.; Morita, M. 1986 Ecotoxicology and Environmental Safety 12:85-94				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Seal, harbor
PHOCA VITULINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7915 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) discussed.

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Tissue	Cases Exposure Route	Range	Mean	General Information
7916 Liver	15	4.2-23.8 ug/g Wet wt	13.1+/-5.9 ug/g Wet wt	Collected 4/10/84 in ice drift area. Males and females, body length mean of 129+/-19 cm, range 90-152 cm. Japan, Hokkaido, Monbetsu City, Okhotsk Sea ICP-AES

ENVIRONMENTAL EXPOSURE; AQUATIC; SEALS; JAPAN; LIVER; KIDNEYS; METALS; CADMIUM; COPPER; ZINC; MERCURY; METALLOTHIONEIN; AGE

Tohyama, C.; Himeno, S.-I.; Watanabe, C.; Suzuki, T.; Morita, M. 1986 Ecotoxicology and Environmental Safety 12:85-94

Shad, American
ALOSA SAPIDISSIMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7917 Gonads	5	1.21-7.22 ug/g	3.058 ug/g	Collected May, 1979, waters of Hartford County. Detection limit 0.1. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS
7918 Muscle	5	0.40-0.78 ug/g	0.61 ug/g	Collected May, 1979, waters of Hartford County. Detection limit 0.1. Part of study to measure contamination levels of the aquatic ecosystem and to develop baseline data for reference in determining suitablitiy for human consumption of various species. Maryland, Chesapeake Bay and tributaries AAS

ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; COPPER; ZINC; LEAD; MERCURY; CADMIUM; CHROMIUM; ARSENIC; MUSCLES; GONADS; LIVER; METALS; CHESAPEAKE BAY; MARYLAND; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING

Eisenberg, M.; Topping, J.J. 1986 Journal of Environmental Science and Health B21(1):87-102

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7919 Blood, plasma	a) 7 b) 15 Ingestion	a) Not given b) Not given	a) 0.98+/-0.22 ug/g b) 1.3+/-0.3 ug/g Wet wt	a) Facility A. Constant, low Cu levels (0.030+/-0.005 ug/g) in water b) Facility B. Fluctuating Cu levels (range 0.08-3.0 ug/g) in water with gradient in copper pipes of 0.35 ug/mL at beginning to 1.0 ug/mL at end. Increased mortality in Facility B. Inappetence, hemoglobinemia, hemoglobinuria AAS
ENVIRONMENTAL EXPOSURE; COPPER; ZINC; MANGANESE; IRON; TERRESTRIAL; WATER POLLUTION; DRINKING WATER; ANIMAL FEEDS Clegg, M.S.; Casey, S.M.; Keen, C.L. 1986 Agri-Practice 7(1):19-22				

Tissue	Cases Exposure Route	Range	Mean	General Information
7920 Blood, plasma	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 g) 6 h) 6 i) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given i) Not given	a) 10.70 umol/L b) 13.60 umol/L c) 16.40 umol/L d) 18.10 umol/L e) 19.20 umol/L f) 19.90 umol/L g) 16.80 umol/L h) 15.30 umol/L i) 16.00 umol/L	a) At 12 wk, grazing 6 km from smelter b) 18 km c) 40 km d) At 50 wk, grazing 6 km from smelter e) 18 km f) 40 km g) At 98 wk, grazing 6 km from smelter h) 18 km i) 40 km Data from additional times and distances included. Pb/Zn smelting complex with soil contamination. 1978-79. Australia, South Australia, Port Pirie
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; COPPER; LEAD; CADMIUM; ZINC; BLOOD; BLOOD PLASMA; KIDNEYS; LIVER; BONES; SHEEP; SMELTERS; LAND POLLUTION; AUSTRALIA Koh, T.-S.; Judson, G.J. 1986 *Bulletin of Environmental Contamination and Toxicology* 37:87-95				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7921 Blood, whole	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 0.9+/-0.1 ug/ml b) 0.8+/-0.1 ug/ml c) 1.0+/-0.1 ug/ml d) 0.6+/-0.02 ug/ml e) 0.5+/-0.02 ug/ml f) 0.5+/-0.02 ug/ml g) 0.5+/-0.03 ug/ml h) 0.5+/-0.03 ug/ml i) 0.5+/-0.03 ug/ml S.E.	a) 3 d after lambing, complete pelleted basal diet, 5 cases b) Diet fortified with CSM (3.5% cottonseed meal), 5 cases c) Diet fortified with SS (7% dried sewage solids), 5 cases d) 42 d after lambing, basal diet e) With CSM f) With SS g) At slaughter, 40 d after weaning, basal diet h) With CSM i) With SS Fine-wool ewes, fed given diets for 2 yr. SS are gamma-irradiated primary municipal sewage solids from Las Cruces, NM. AAS
7922 Bone	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 3+/-0.5 ug/g b) 4+/-0.5 ug/g c) 3+/-0.5 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE

Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424

Tissue	Cases Exposure Route	Range	Mean	General Information
7923 Brain	a) 7 b) 15 Ingestion	a) Not given b) Not given	a) 11.4+/-3.6 ug/g b) 9.4+/-3.1 ug/g Wet wt	a) Facility A. Constant, low Cu levels (0.030+/-0.005 ug/g) in water b) Facility B. Fluctuating Cu levels (range 0.08-3.0 ug/g) in water with gradient in copper pipes of 0.35 ug/mL at beginning to 1.0 ug/mL at end. Increased mortality in Facility B. Inappetence, hemoglobinemia, hemoglobinuria AAS

ENVIRONMENTAL EXPOSURE; COPPER; ZINC; MANGANESE; IRON; TERRESTRIAL; WATER POLLUTION; DRINKING WATER; ANIMAL FEEDS

Clegg, M.S.; Casey, S.M.; Keen, C.L. 1986 Agri-Practice 7(1):19-22

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7924 Kidney	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 11+/-0.4 ug/g b) 10+/-0.4 ug/g c) 10+/-0.4 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424				

Tissue	Cases Exposure Route	Range	Mean	General Information
7925 Kidney	a) 7 b) 15 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 3.4+/-0.6 ug/g b) 3.4+/-0.8 ug/g c) 2.1+/-0.8 ug/g d) 1.9+/-0.8 ug/g Wet wt	a) Cortex. Facility A. Constant, low Cu levels (0.030+/-0.005 ug/g) in water b) Facility B. Fluctuating Cu levels (range 0.08-3.0 ug/g) in water with gradient in copper pipes of 0.35 ug/mL at beginning to 1.0 ug/mL at end c) Facility A. Medulla d) Facility B. Medulla. Increased mortality in Facility B. Inappetence, hemoglobinemia, hemoglobinuria AAS
ENVIRONMENTAL EXPOSURE; COPPER; ZINC; MANGANESE; IRON; TERRESTRIAL; WATER POLLUTION; DRINKING WATER; ANIMAL FEEDS Clegg, M.S.; Casey, S.M.; Keen, C.L. 1986 Agri-Practice 7(1):19-22				

Tissue	Cases Exposure Route	Range	Mean	General Information
7926 Kidney	a) 3 b) 3 c) 3 d) 3 e) 3 f) 3 g) 3 h) 3 i) 3 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given i) Not given	a) 0.2 mmol/kg b) 0.3 mmol/kg c) 0.3 mmol/kg d) 0.3 mmol/kg e) 0.2 mmol/kg f) 0.3 mmol/kg g) 0.2 mmol/kg h) 0.2 mmol/kg i) 0.3 mmol/kg	a) At 24 wk, grazing 6 km from smelter b) 16 km c) 40 km d) At 50 wk, grazing 6 km from smelter e) 16 km f) 40 km g) At 98 wk, grazing 6 km from smelter h) 16 km i) 40 km Data from additional times and distances included. Pb/Zn smelting complex with soil contamination. 1978-79. Cortex. Australia, South Australia, Port Pirie
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; COPPER; LEAD; CADMIUM; ZINC; BLOOD; BLOOD PLASMA; KIDNEYS; LIVER; BONES; SHEEP; SMELTERS; LAND POLLUTION; AUSTRALIA Koh, T.-S.; Judson, G.J. 1986 Bulletin of Environmental Contamination and Toxicology 37:87-95				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7927 Liver	a) 7 b) 15 Ingestion	a) 57.1-286 ug/g b) 62.5-620 ug/g Wet wt	a) 148.8+/-82.6 ug/g b) 284.5+/-118.2 ug/g Wet wt	a) Facility A. Constant, low Cu levels (0.030+/-0.005 ug/g) in water b) Facility B. Fluctuating Cu levels (range 0.08-3.0 ug/g) in water with gradient in copper pipes of 0.35 ug/mL at beginning to 1.0 ug/mL at end Significantly different $p<0.05$. Increased mortality in Facility B. Inappetence, hemoglobinemia, hemoglobinuria AAS
ENVIRONMENTAL EXPOSURE; COPPER; ZINC; MANGANESE; IRON; TERRESTRIAL; WATER POLLUTION; DRINKING WATER; ANIMAL FEEDS *Clegg, M.S.; Casey, S.M.; Keen, C.L. 1986 Agri-Practice 7(1):19-22*				

Tissue	Cases Exposure Route	Range	Mean	General Information
7928 Liver	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 32+/-8 ug/g b) 30+/-8 ug/g c) 37+/-8 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424				

Tissue	Cases Exposure Route	Range	Mean	General Information
7929 Liver	a) 8 b) 8 c) 8 d) 8 e) 8 f) 8 g) 8 h) 8 i) 8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given i) Not given	a) 0.1 mmol/kg b) 0.8 mmol/kg c) 2.9 mmol/kg d) 1.8 mmol/kg e) 3.0 mmol/kg f) 3.8 mmol/kg g) 1.1 mmol/kg h) 5.4 mmol/kg i) 3.1 mmol/kg	a) At 24 wk, grazing 6 km from smelter b) 18 km c) 40 km d) At 50 wk, grazing 6 km from smelter e) 18 km f) 40 km g) At 98 wk, grazing 6 km from smelter h) 18 km i) 40 km Data from additional times and distances included. Pb/Zn smelting complex with soil contamination. 1978-79. Australia, South Australia, Port Pirie
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; COPPER; LEAD; CADMIUM; ZINC; BLOOD; BLOOD PLASMA; KIDNEYS; LIVER; BONES; SHEEP; SMELTERS; LAND POLLUTION; AUSTRALIA Koh, T.-S.; Judson, G.J. 1986 Bulletin of Environmental Contamination and Toxicology 37:87-95				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7930 Milk	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.7+/-0.1 ug/ml b) 0.7+/-0.1 ug/ml c) 1.0+/-0.1 ug/ml d) 0.4+/-0.04 ug/ml e) 0.3+/-0.04 ug/ml f) 0.2+/-0.04 ug/ml S.E.	a) 3 d after lambing, complete pelleted basal diet, 5 cases b) Diet fortified with CSM (3.5% cottonseed meal), 5 cases c) Diet fortified with SS (7% dried sewage solids), 5 cases d) 42 d after lambing, basal diet e) With CSM f) With SS Fine-wool ewes, fed given diets for 2 yr. SS are gamma-irradiated primary municipal sewage solids from Las Cruces, NM. AAS
7931 Muscle	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 3+/-0.3 ug/g b) 4+/-0.3 ug/g c) 4+/-0.3 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS
7932 Spleen	a) 5 b) 5 c) 5 Ingestion	a) Not given b) Not given c) Not given	a) 5+/-0.4 ug/g b) 5+/-0.4 ug/g c) 5+/-0.4 ug/g S.E. Dry wt	a) Complete pelleted basal diet b) Diet fortified with 3.5% cottonseed meal c) Diet fortified with 7% dried primary municipal sewage solids from Las Cruces, NM At slaughter. Fine-wool ewes, fed given diets for 2 yr. AAS

SHEEP; BLOOD; BLOOD SERUM; MILK; LIVER; KIDNEYS; SPLEEN; BONES; MUSCLES; TERRESTRIAL; ADULTS; COMPARATIVE EVALUATIONS; CALCIUM; COBALT; COPPER; IRON; POTASSIUM; MAGNESIUM; MANGANESE; SODIUM; PHOSPHORUS; ZINC; CADMIUM; NICKEL; LEAD; CHLORINE; ANIMAL FEEDS; BIOLOGICAL MONITORING; DIETS; MEAT; DELIBERATE EXPOSURE

Sanson, D.W.; Hallford, D.M.; Smith, G.S. 1984 Journal of Animal Science 59(2):416-424

Shoveler
ANAS CLYPEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7933 Bone	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 2.8+/-1.0 mg/kg b) 2.6+/-1.2 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES

(next page)

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Shoveler
ANAS CLYPEATA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
7934 Feathers	a) 49 b) 6 Ingestion	a) Not given b) Not given	a) 8.1+/-0.6 mg/kg b) 8.8+/-0.8 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard Significant difference ($p<0.001$). Texas, Chambers County ES
BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172				

Shrew, short-tailed
BLARINA BREVICAUDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7935 Body	a) 18 b) 7	a) Not given b) Not given	a) 11+/-0.4 mg/kg b) 11+/-1.2 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Shrimp
PALAEMON ELEGANS

Tissue	Cases Exposure Route	Range	Mean	General Information
7936 Body				Review. Biology of heavy metals in marine organisms discussed - including uptake, accumulation, toxicity, and possible detoxification mechanisms.
REVIEW; ENVIRONMENTAL EXPOSURE; AQUATIC; CRUSTACEANS; BODY; ZINC; COPPER Rainbow, P.S. 1985 International Journal of Environmental Studies 25:195-211				

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Shrimp
PALAEMON ELEGANS

Tissue	Cases Exposure Route	Range	Mean	General Information
7937 Body	21	7.2-23 mg/kg Wet wt	13 mg/kg Wet wt	Analyzed cooked and unpeeled. Mixed samples weighed about 20 kg. Collected from Western Wadden Sea, 1977. Netherlands AAS
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40				

Tissue	Cases Exposure Route	Range	Mean	General Information
7938 Muscle	a) 30 b) 30 c) 30 d) 30	a) Not given b) Not given c) Not given d) Not given	a) 32.1+/-6.91 ug/g b) 26.9+/-7.86 ug/g c) 31.3+/-4.75 ug/g d) 30.3+/-6.26 ug/g Dry wt	a) Aquaculture pond, seawater with 10% mixture of effluent, low density (4.5 shrimp/sq m), 29% survival b) Same effluent mixture, high density (30 shrimp/sq m), 27% survival c) Seawater only, fed Purina Ration, low density (6.0 shrimp/sq m), 50% survival Effluent from Harbor Branch Foundation treatment plant, seawater from Harbor Branch Foundation ship canal. High Cu levels probably from antifouling paints from vessels in the ship canal. Florida, Fort Pierce AAS
MUSCLES; AQUATIC; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; CRUSTACEANS; CADMIUM; SELENIUM; CHROMIUM; COPPER; LEAD; WATER POLLUTION; FLORIDA Landau, M.; Pierce, R.H.; Williams, L.D.; Norris, D.R. 1985 Bulletin of Environmental Contamination and Toxicology 35:537-545				

Slug
PHILOMYCUS CAROLINIANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7939 Body, whole		Not given	83 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Slugs not observed at Palmerton, 2 km downwind. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sole
SOLEA SOLEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7940 Body	21	0.20-0.72 mg/kg Wet wt	0.39 mg/kg Wet wt	Edible parts, mixed samples weighing about 20 kg. Collected near the coast of Holland, 1977. Netherlands AAS

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NETHERLANDS; CRUSTACEANS; MOLLUSKS; LEAD; CADMIUM; MERCURY; SELENIUM; ARSENIC; NICKEL; CHROMIUM; ZINC; COPPER; TRACE ELEMENTS; BIOINDICATORS; BODY
Vos, G.; Hovens, J.P.C.; Hagel, P. 1986 Science of the Total Environment 52:25-40

Sparrow, field
SPIZELLA PUSILLA

Tissue	Cases Exposure Route	Range	Mean	General Information
7941 Body	1	Not applicable	6.1 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS
Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Sponge
SPIRASTRELLA CUSPIDIFERA

Tissue	Cases Exposure Route	Range	Mean	General Information
7942 Body		0-14 ug/g Dry wt	5.0 ug/g Dry wt	Collected during 1978-80 Levels higher during post monsoon (Oct-Jan). High degree of species specificity for certain elements. India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS
Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sponge (P. foetida)
PROSTYLYSSA FOETIDA

Tissue	Cases Exposure Route	Range	Mean	General Information
7943 Body		10.0-25 ug/g Dry wt	13.5 ug/g Dry wt	Collected during 1978-80 Levels higher during post-monsoon (Oct-Jan). India, Bombay, Tarapur coast X-ray spectrom

BODY; AQUATIC; SPONGES; ENVIRONMENTAL EXPOSURE; INDIA; METALS; HALOGENS; CHROMIUM; NICKEL; IRON; TITANIUM; ZINC; CADMIUM; TIN; STRONTIUM; COBALT; MOLYBDENUM; LEAD; MANGANESE; COPPER; VANADIUM; ALUMINUM; IODINE; BROMINE; SODIUM; POTASSIUM; CALCIUM; MAGNESIUM; WATER POLLUTION; BIOACCUMULATION; BIOLOGICAL MONITORING; BIOCONCENTRATION; BIOINDICATORS

Patel, B.; Balani, M.C.; Patel, S. 1985 Science of the Total Environment 41:143-152

Stickleback
GASTEROSTEUS ACULEATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7944 Body		Not given	40 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS

BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION

Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362

Sunfish, redbreast
LEPOMIS AURITUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7945 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS

Koli, A.K.; Whitmore, R. 1983 Environment International 9:361-362

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Sunfish, spotted
LEPOMIS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7946 Muscle	2	<0.001-<0.001 mg/kg Wet wt	<0.001 mg/kg Wet wt	Collected in 1982 from Savannah River near the Savannah River Nuclear Plant. Calculated mean. South Carolina AAS

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; SOUTH CAROLINA; TRACE ELEMENTS; METALS; BIOACCUMULATION; POWER PLANTS; WATER POLLUTION; HEALTH HAZARDS
Koli, A.K.; Whitmore, R. 1988 Environment International 9:361-362

Tanager, scarlet
PIRANGA OLIVACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
7947 Body	2	Not applicable	10 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS
Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Teal, green-winged
ANAS CRECCA

Tissue	Cases Exposure Route	Range	Mean	General Information
7948 Bone	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 0.9+/-0.2 mg/kg b) 0.4+/-0.2 mg/kg Wet wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES
7949 Feathers	a) 336 b) 11 Ingestion	a) Not given b) Not given	a) 16.0+/-1.3 mg/kg b) 13.0+/-1.1 mg/kg Dry wt S.E.	a) Without ingested shot b) With ingested shot in gizzard No significant difference. Texas, Chambers County ES

BONES; FEATHERS; WATERFOWL; AQUATIC; ENVIRONMENTAL EXPOSURE; TEXAS; LEAD POISONING; METAL POISONING; METALS; LEAD; ARSENIC; TIN; SELENIUM; MANGANESE; CADMIUM; CHROMIUM; COPPER; NICKEL; BIOACCUMULATION; DIETS
Hall, S.L.; Fisher, F.M. 1985 Bulletin of Environmental Contamination and Toxicology 35:163-172

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Tern, common
STERNA HIRUNDO

Tissue	Cases Exposure Route	Range	Mean	General Information
7950 Liver	a) 14 b) 15 c) 6	a) 20.6-181.1 ug/g b) 19.5-82.7 ug/g c) 24.8-29.7 ug/g Dry wt	a) 59.3 ug/g b) 28.7 ug/g c) 26.5 ug/g Dry wt	a) Providence Barge, Providence River b) Wickford Tower Narragansett Bay c) Price Neck, Rhode Island Sound Nesting sites, a) closest to Providence, major area of electroplating industry. 13-16 day old animals, 1981. Detection limit 0.10 ug/g. Rhode Island AAS
ENVIRONMENTAL EXPOSURE; AQUATIC; BIRDS; FISHES; COPPER; IRON; ZINC; NICKEL; LEAD; CHROMIUM; MAGNESIUM; MANGANESE; BODY; LIVER; WATER POLLUTION; INDUSTRIAL AREAS; INDUSTRIAL POLLUTION; RHODE ISLAND Custer, T.W.; Franson, J.C.; Moore, J.F.; Myers, J.E. 1986 Environmental Pollution (Series A) 41:33-52				

Thousand-legs (millipede)
SPIROBILIDA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7951 Body		Not given	160 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 2 km upwind of smelters. Levels much higher than in other litter invertebrates. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Thrasher, brown
TOXOSTOMA RUFUM

Tissue	Cases Exposure Route	Range	Mean	General Information
7952 Body	1	Not applicable	10 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Thrush, wood

HYLOCICHLA MUSTELINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7953 Body	a) 5 b) 2	a) 7.9-9.8 mg/kg b) 7.1-16 mg/kg Dry wt	a) Not given b) 11.6 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Tilefish

LOPHOLATILUS CHAMAELEONTICEPS

Tissue	Cases Exposure Route	Range	Mean	General Information
7954 Liver				Review. Cd, Pb, Hg and Se levels increased as organism aged. Cr, Cu, Fe, Ni and Zn decreased. Mn increased with age in mammals but decreased in birds and fish. Associated factors (diet, differential uptake, rates, biomagnification) *discussed.*

REVIEW; BODY; LIVER; BRAIN; HEART; KIDNEYS; MUSCLES; BONES; VERTEBRAE; EGGS; EAR; AQUATIC; FISHES; MAMMALS; BIRDS; ENVIRONMENTAL EXPOSURE; ADULTS; AGE; JUVENILES; FETUS; CADMIUM; CHROMIUM; COPPER; IRON; LEAD; MANGANESE; MERCURY; NICKEL; SELENIUM; ZINC; BIOACCUMULATION; FOOD CONTAMINATION; POPULATION EXPOSURE

Eisler, R. 1984 Biological Trace Element Research 6:165-180

Toad, American

BUFO AMERICANUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7955 Body, whole	5	5.6-7.6 mg/kg Dry wt	6.9 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Copper

7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Toad, Woodhouse's
BUFO WOODHOUSEI

Tissue	Cases Exposure Route	Range	Mean	General Information
7956 Body, whole	3	6.0-7.9 mg/kg Dry wt	6.7 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. None observed at Palmerton, 2 km downwind of smelters. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Towhee, rufous-sided
PIPILO ERYTHROPHTHALMUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7957 Body	1	Not applicable	7.3 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Trout, cutthroat
SALMO CLARKI

Tissue	Cases Exposure Route	Range	Mean	General Information
7958 Muscle		Not given	5 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS
BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362				

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
7959 Liver		Not given	540 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS
7960 Muscle		Not given	5 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS

BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION

Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362

Turtle, snapping
CHELYDRA SERPENTINA

Tissue	Cases Exposure Route	Range	Mean	General Information
7961 Kidney	a) 7 b) 6 c) 8 d) 3 e) 8	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.82+/-0.28 ppm b) 1.07+/-0.43 ppm c) 1.81+/-1.20 ppm d) 1.27+/-0.38 ppm e) 1.73+/-1.01 ppm Wet wt	a) Males, uncontaminated area of Maryland b) Females c) Contaminated brackish water, Hakensack Meadowlands New Jersey, males d) Females e) Contaminated fresh water, New Jersey, males Collected 6-8/81 and 6-8/82. Frequency of detection 100%. Detection limit 0.1 ppm. New Jersey; Maryland Lowered lipid content, reduced growth in animals from brackish-water area in NJ AAS
7962 Liver	a) 7 b) 6 c) 8 d) 3 e) 8	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1.28+/-0.52 ppm b) 1.57+/-0.59 ppm c) 9.72+/-4.61 ppm d) 5.17+/-3.59 ppm e) 2.08+/-0.63 ppm Wet wt	a) Males, uncontaminated area of Maryland b) Females c) Contaminated brackish water, Hakensack Meadowlands New Jersey, males d) Females e) Contaminated fresh water, New Jersey, males Collected 6-8/81 and 6-8/82. Frequency of detection 100%. Detection limit 0.1 ppm. New Jersey; Maryland Lowered lipid content, reduced growth in animals from brackish-water area in NJ AAS

ENVIRONMENTAL EXPOSURE; TURTLES; AQUATIC; LIVER; KIDNEYS; ADIPOSE TISSUE; NEW JERSEY; MARYLAND; CADMIUM; CHROMIUM; COPPER; LEAD; MERCURY; NICKEL; ZINC; CHLORDANE; NONACHLOR; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDES; METALS; WATER POLLUTION

Albers, P.H.; Sileo, L.; Mulhern, B.M. 1986 Archives of Environmental Contamination and Toxicology 15:39-49

Copper

7440-50-8

Cu

AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Underwing (moth)

CATOCALA PALAEOGAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
7963 Body		a) Not given b) Not given	a) 13 mg/kg b) 15 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Underwing, copper

AMPHIPYRA PYRAMIDOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
7964 Body		a) Not given b) Not given	a) 5.5 mg/kg b) 9.5 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Warbler

Tissue	Cases Exposure Route	Range	Mean	General Information
7965 Body	1	Not applicable	10 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Warbler, black-and-white
MNIOTILTA VARIA

Tissue	Cases Exposure Route	Range	Mean	General Information
7966 Body	a) 1 b) 1	a) Not applicable b) Not applicable	a) 5.7 mg/kg b) 6.4 mg/kg Dry wt	a) Bake Oven Knob, 10 km upwind of smelters b) Palmerton, 2 km downwind Collected June-Oct 79. Alimentary canals, feet, tails, beaks, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Warbler, yellow-throated
DENDROICA DOMINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7967 Body	1	Not applicable	8.5 mg/kg Dry wt	Collected June-Oct 79 at Palmerton site, 2 km downwind of smelters. Alimentary canal, feet, tail, beak, skin not included. Pennsylvania, eastern, Blue Mountain AAS
BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86				

Weevil, waterhyacinth
NEOCHETINA EICHHORNIAE

Tissue	Cases Exposure Route	Range	Mean	General Information
7968 Body	a) 50 b) 50 c) 50 Ingestion	a) Not given b) Not given c) Not given	a) 30.42 ug/g b) 38.37 ug/g c) 32.77 ug/g Dry wt	a) Controls, no Pb in water, 15.35 ug/g in leaves b) 1.0 ug/L, 21.62 ug/g in water and leaves, respectively c) 2.5 ug/L, 44.77 ug/g in water, leaves Animals from Camp's Canal and River Styx fed waterhyacinth leaves grown with or without metal added to medium. Florida, Alachua County 10- and 20-day mortalities for each group were: 0.8 and 2.8, 1.4 and 0.8, 0.0 and 0.0 AAS
DELIBERATE EXPOSURE; AQUATIC; BODY; WEEVILS; LEAD; CADMIUM; COPPER; FLORIDA; WATER POLLUTION; VEGETATION; METALS; INGESTION; INSECTS Kay, S.H.; Haller, W.T. 1986 Bulletin of Environmental Contamination and Toxicology 37:239-245				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Worm, annelid
EISENOIDES CAROLINENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7969 Body, whole		Not given	12 mg/kg Dry wt	Collected June-Oct 79 at Bake Oven Knob, 10 km upwind of smelters. Earthworms not observed at Palmerton, 2 km downwind. Pennsylvania, eastern, Blue Mountain AAS

BODY; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; MAMMALS; BIRDS; INSECTS; SLUGS; MILLIPEDES; EARTHWORMS; AMPHIBIANS; PENNSYLVANIA; LEAD; ZINC; CADMIUM; COPPER; METALS; AIR POLLUTION; SOILS; ANIMAL POPULATIONS; BIOACCUMULATION; INDUSTRIAL EMISSIONS; POPULATION EXPOSURE; SMELTERS

Beyer, W.N.; Pattee, O.H.; Sileo, L.; Hoffman, D.J.; Mulhern, B.M. 1985 Environmental Pollution (Series A) 38:63-86

Zooplankton

Tissue	Cases Exposure Route	Range	Mean	General Information
7970 Body		Not given	195 ug/g Dry wt	Collected from south end of Buttle Lake, Vancouver Island, in 1981. Estimated from graph. Pooled samples. Canada AAS

BODY; LIVER; MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; CANADA; METAL POISONING; LEAD POISONING; METALS; LEAD; ZINC; CADMIUM; COPPER; BIOACCUMULATION; INDUSTRIES; INDUSTRIAL POLLUTION; MINING; WATER POLLUTION

Roch, M.; Nordin, R.N.; Austin, A.; McKean, C.J.P.; Deniseger, J.; Kathman, R.D.; McCarter, J.A.; Clark, J.R. 1985 Archives of Environmental Contamination and Toxicology 14:347-362

Tissue	Cases Exposure Route	Range	Mean	General Information
7971 Body	5	Not applicable	1.46 ug/g	Collected 8/83 from polluted lake. Levels of 26.0 ug/L and 172.70 mg/kg (means) in water and sediment, respectively. India, Hyderabad, Lake Husainsagar AAS

ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; ZOOPLANKTON; CADMIUM; COPPER; BODY; WATER POLLUTION; INDIA; BIOMAGNIFICATION

Prahalad, A.K.; Seenayya, G. 1986 Archives of Environmental Contamination and Toxicology 15:417-425

Coronene

191-07-1
C24-H12

Mussel
MYTILUS GALLOPROVINCIALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7972 Body	a) 29 b) 28	a) Not given b) Not given	a) 4 ppb b) 3 ppb Wet wt	a) Western, industrial area b) Eastern, agricultural area One of 17 PAHs measured. Total PAH was 110 ng/g, carcinogenic PAH 38 ng/g (values in eastern area were 77 and 14 ng/g, respectively. Greece, Thermaikos Gulf GC
ENVIRONMENTAL EXPOSURE; AQUATIC; MUSSELS; MOLLUSKS; WATER POLLUTION; POLYCYCLIC AROMATIC HYDROCARBONS; GREECE; BODY; CARCINOGEN Iosifidou, H.G.; Kilikidis, S.D.; Kamarianos, A.P. 1982 Bulletin of Environmental Contamination and Toxicology 28:535-541				

Cyanide

57-12-5
C-N
MW 26.02

Condor, Andean
VULTURE GRYPHUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7973 Blood	1 Ingestion	Not applicable	1.2 ppm	Free form, animal dosed with 36 mg/kg Na-C-N. Sampled immediately after death. Mean calculated by extractor. Bound C-N was 0.51 ppm. Additional data on effects of freezing samples. GLC
DELIBERATE EXPOSURE; CYANIDE; TERRESTRIAL; BIRDS; BLOOD; MEASUREMENT METHODS Krynitsky, A.J.; Wiemeyer, S.N.; Hill, E.F.; Carpenter, J.W. 1986 Environmental Toxicology and Chemistry 5:787-789				

Vulture, turkey
CATHARTES AURA

Tissue	Cases Exposure Route	Range	Mean	General Information
7974 Blood	5 Ingestion	0.95-4.1 ppm	2.63 ppm	Free form, animals dosed with 36 mg/kg Na-C-N. Sampled immediately after death. Mean calculated by extractor. Range of bound C-N was 0.61-0.91 ppm. Additional data on effects of freezing samples. GLC
DELIBERATE EXPOSURE; CYANIDE; TERRESTRIAL; BIRDS; BLOOD; MEASUREMENT METHODS Krynitsky, A.J.; Wiemeyer, S.N.; Hill, E.F.; Carpenter, J.W. 1986 Environmental Toxicology and Chemistry 5:787-789				

Cyclohexane, methyl-

108-87-2
C7-H14
MW 98.18, MP -126.4 C, BP 100.3 C, VP 40 mm Hg at 22.0 C

Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
7975 Body		Not given	0.9 ppb Wet wt	The Rigolets, navigable channels into Lake Pontchartrain, specimens collected May-June, 1980. 5 samples. Louisiana GC/MS

BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION
Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
7976 Body		Not given	1.3 ppb Wet wt	Collected in May-June, 1980, from mouth of Inner Harbor Navigational Canal leading to Lake Pontchartrain. Expressed as equivalents of 2-bromo-1-chloropropane. Louisiana GC/MS

BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION
Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)

319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Antelope

Tissue	Cases Exposure Route	Range	Mean	General Information
7977 Liver		Not given	0.03 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
7978 Muscle		Not given	0.03 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES
Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
7979 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.01 ug/g b) Not detected c) Not detected d) 0.01 ug/g Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Bayou Petite Prairie c) 2 from Spring Bayou d) 3 from Raccouri Old River Collected 6/81, 2.3-6.6% lipids, wt 307-431 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Bass, striped
MORONE SAXATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
7980 Gonads	10	0.001-0.004 ug/g	0.03 ug/g	Collected Rock hall Region, April 1979. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.001 ug/g. Value below established action level. Mean calculated by extractor. Maryland, Chesapeake Bay and tributaries GC-EC
7981 Muscle	10	0.001-0.004 ug/g	0.0025 ug/g	Collected Rock hall Region, April 1979. Part of study identifying and quantifying organochlorine residues from various regions of the bay. Detection limit 0.001 ug/g. Value below established action level. Mean calculated by extractor. Maryland, Chesapeake Bay and tributaries GC-EC
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; MUSCLES; EGGS; GONADS; DDT; DDE; DDD; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M; Topping, J.J. 1985 Journal of Environmental Science and Health B20(6):729-742				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Boar
SUS SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
7982 Liver	5	Not detected-0.01 ppm Wet wt	Not given	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
7983 Muscle	5	Not detected-0.01 ppm Wet wt	0.005 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Bowfin
AMIA CALVA

Tissue	Cases Exposure Route	Range	Mean	General Information
7984 Body, whole		a) Not given b) Not given c) Not given	a) Not detected b) Not detected c) 0.02 ug/g Wet wt Geometric	a) 1 composite sample from lake Verret b) 1 from Lake Fausse Point c) 1 from Bayou Petite Prairie Collected 6/81, 2.2-5.6% lipids, wt 1310-2000 g. Detection limits not given. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Buffalo, smallmouth
ICTIOBUS BUBALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7985 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.04 ug/g b) Not detected c) Not detected d) Not detected Wet wt Geometric	a) 2 composite samples from Lake Fausse Point b) 1 from Bayou Petite Prairie c) 1 from Spring Bayou d) 1 from Raccouri Old River Collected 6/81, 0.5-8.8% lipids, wt 687-1030 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
7986 Body	3-5/site	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) 0 mg/kg b) 0.015 mg/kg c) 0 mg/kg d) 0.003 mg/kg e) 0.004 mg/kg f) 0 mg/kg g) 0.036 m/gkg h) 0.006 mg/kg Lipid wt	a) San Joaquin River near Ft Washington b) At Firebaugh c) At Freemont Ford State Recreational Area d) Near Crow's Landing e) At South County Park f) Salt Slough below Lander Avenue g) Merced River below CA highway h) At George J. Hatfield State Recreational Area Organochlorine levels generally increased downstream, irrigated agriculture areas. July, 1981. Detection limit 0.002 mg/kg. California, San Joaquin Valley GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; PESTICIDES; INDUSTRIAL CHEMICALS; CALIFORNIA; CHLORDANE; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; WATER POLLUTION; INSECTICIDES; HERBICIDES; BODY Saiki, M.K.; Schmitt, C.J. 1986 Archives of Environmental Contamination and Toxicology 15:357-366				

Tissue	Cases Exposure Route	Range	Mean	General Information
7987 Liver	1	Not applicable	35 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Catfish
ANARHICHAS LUPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7988 Liver	2	3-5 ug/kg Wet wt	4+/-1 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION

Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7989 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0.012 ppm b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Mean a) exceeded by S.E. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION

Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Tissue	Cases Exposure Route	Range	Mean	General Information
7990 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.01 ug/g b) Not detected c) 0.03 ug/g d) 0.01 ug/g e) 0.04 ug/g f) 0.01 ug/g Wet wt Geometric	a) 3 composite samples from Lake Verret b) 1 from lake Fausse Point c) 1 from Little Pigeon Bayou d) 3 from Grand Lake e) 1 from Henderson Lake f) 3 from Raccouri Old River Collected 6/81, 1.3-6.5% lipids, wt 57-317 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS

Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7991 Muscle	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
7992 Adipose		Not given	1 ppb	Background residue in tissue from 32 samples prepared by US Dept. of Agriculture, Food Safety and Inspection Service, Beltsville, MD and submitted as blind duplicates for analysis to 7 laboratories.
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; CATTLE; ADIPOSE TISSUE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; DDE; HEXACHLOROBENZENE; FOOD CONTAMINATION Ault, J.A.; Spurgeon, T.E.; Gillard, D.S.; Mallinson, E.T. 1985 Journal of the Association of Official Analytical Chemists 68(5):941-944				

Tissue	Cases Exposure Route	Range	Mean	General Information
7993 Liver		Not given	0.02 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Cattle
BOS *sp.*

Tissue	Cases Exposure Route	Range	Mean	General Information
7994 Milk, fat	2	0.007-0.015 mg/kg	0.011 mg/kg	Study also looked at levels in milk products, human milk, fruits and vegetables. All levels below FAO and WHO recommended safe levels. Greece GC/MS
MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; GREECE; CHLORINE ORGANIC COMPOUNDS; HEXACHLOROCYCLOHEXANE; DDT; BIOACCUMULATION Fytianos, K.; Vasilikiotis, G.; Weil, L; Kavlendis, E.; Laskaridis, N. 1985 Bulletin of Environmental Contamination and Toxicology 34:504-508				

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7995 Liver		Not given	0.03 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
7996 Muscle		Not given	0.01 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Chub, creek
SEMOTILUS ATROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
7997 Body, whole	32	5-8 ng/g Wet wt	Not given	Collected Jun-Aug 1980, 1981, or 1982 at Arapaho National Wildlife Refuge, CO. Length 51-148 mm, avg wt 9.7 g. Data also given for mixed species. Colorado GC
ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Chub, Rio Grande
GILA NIGRESCENS

Tissue	Cases Exposure Route	Range	Mean	General Information
7998 Body, whole	16	14-18 ng/g Wet wt	Not given	Collected Jun-Aug 1980, 1981, or 1982 at Monte Vista National Wildlife Refuge, CO. Length 81-117 mm, avg wt 10 g. Data also given for mixed species. Colorado GC
ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717				

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
7999 Liver	18	4-140 ug/kg Wet wt	35+/-30 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8000 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8001 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.03 ug/g b) Not detected c) Not detected d) Not detected e) Not detected f) 0.01 ug/g Wet wt Geometric	a) 3 composite samples from Lake Fausse Point b) 3 from Little Pigeon Bayou c) 2 from Henderson Lake d) 1 from Bayou Petite Prairie e) 2 from Spring Bayou f) 3 from Raccouri Old River Collected 6/81, 1.3-4.1% lipids, wt 92-251 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Crayfish
PROCAMBARUS CLARKII

Tissue	Cases Exposure Route	Range	Mean	General Information
8002 Body, whole	50	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 10 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Deer, fallow
DAMA DAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
8003 Liver	8	Not detected-0.02 ppm Wet wt	0.010 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Deer, red
CERVUS ELAPHUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8004 Liver	8	Not detected-0.02 ppm Wet wt	0.007 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
8005 Body		0.00-0.04 ug/g Wet wt	Not given	Study of 315 composite samples (3-5 adults of species) from 107 stations in more than 45 states, 1980-81. Range from total of 62 species. Maximum value in lipid wt=0.9 ug/g. Part of National Pesticides Monitoring Program. United States GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; UNITED STATES; PESTICIDES; PESTICIDE RESIDUES; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; TOXAPHENE; COMPARATIVE EVALUATIONS; WATER POLLUTION; BIOLOGICAL MONITORING Schmitt, C.J.; Zajicek, J.L.; Ribick, M.A. 1985 Archives of Environmental Contamination and Toxicology 14:225-260				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
8006 Muscle	a) 140 b) 14 c) 15 d) 98 e) 24	a) Not detected-0.01 ug/g b) Not detected c) Not detected-0.34 ug/g d) Not detected-0.008 ug/g e) Not detected-0.006 ug/g	a) Not detected b) Not detected c) 0.001 ug/g d) 0.002 ug/g e) 0.002 ug/g	a) Collected 1976 b) 1977 c) 1978 d) 1979 e) 1980 Collected in Maryland waters. Part of study identifying and quantifying organochlorine residues in samples from various regions of the bay. Detection limit 0.001 ug/g. Values below established action level. Maryland, Chesapeake Bay and tributaries GC-EC
ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; MUSCLES; EGGS; GONADS; DDT; DDE; DDD; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; BIOACCUMULATION; WATER POLLUTION; BIOLOGICAL MONITORING; TREND MONITORING Eisenberg, M; Topping, J.J. 1985 Journal of Environmental Science and Health B20(6):729-742				

Fish, black scabbard
APHANOPUS CARBO

Tissue	Cases Exposure Route	Range	Mean	General Information
8007 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected South of Madeira. Deep water (800-1200 m) habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, parrot
SPARISOMA (EUSCARUS) CRETENSE

Tissue	Cases Exposure Route	Range	Mean	General Information
8008 Liver	1	Not applicable	9 mg/kg Lipid basis	Collected from local fish market on Proto Santo, East of Madeira. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Fish, scorpion
SCORPAENA SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
8009 Liver	1	Not applicable	7 mg/kg Lipid basis	Collected off Northern Coast of Sao Miguel, Azores. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Flounder
PLATICHTHYS FLESUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8010 Liver	10	Not detected-4 ug/kg Wet wt	1+/-2 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Frog
RANA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8011 Body, whole	25	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC

(next page)

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Frog
RANA sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8012 Muscle	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Gar, spotted
LEPISOSTEUS OCULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8013 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.01 ug/g b) Not detected c) 0.01 ug/g d) 0.19 ug/g e) 0.01 ug/g f) Not detected g) Not detected h) 0.01 ug/g Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Lake Fausse Point c) 3 from Little Pigeon Bayou d) 1 from Grand Lake e) 2 from Henderson Lake f) 1 from Bayou Petite Prairie g) 1 from Spring Bayou h) 1 from Raccouri Old River Collected 6/81, 1.6-12.9% lipids, wt 303-860 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8014 Liver		Not given	0.02 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

(next page)

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Goat
CAPRA sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8015 Muscle		Not given	0.03 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Haddock
MELANOGRAMMUS AEGLEFINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8016 Liver	7	8-48 ug/kg Wet wt	23+/-15 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Heron, yellow-crowned night
NYCTANASSA VIOLACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
8017 Body, whole	10	a) Not applicable b) Not given c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) 0.025 ppm c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Limit of detection 0.05 ppm. Mean b) exceeded by S.E. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Lynx, pardel
LYNX PARDINA

Tissue	Cases Exposure Route	Range	Mean	General Information
8018 Liver	5	Not detected-0.02 ppm Wet wt	0.010 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8019 Muscle	5	Not detected-0.01 ppm Wet wt	0.004 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Minnow, fathead
PIMEPHALES PROMELAS

Tissue	Cases Exposure Route	Range	Mean	General Information
8020 Body, whole	a) 95 b) 80 c) 96	a) 6-16 ng/g b) Not given c) Not given Wet wt	a) Not given b) 6 ng/g c) 5 ng/g Wet wt	a) Monte Vista National Wildlife Refuge (NWR), CO b) Arapaho NWR, CO c) Arrowwood NWR, ND Collected Jun-Aug 1980, 1981, or 1982. Length 24-81 mm, avg wt 3.1 g, 2.9 g, and 1.3 g, respectively. Data also given for mixed species. Colorado; North Dakota GC

ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE

Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Minnow, plains
HYBOGNATHUS PLACITA

Tissue	Cases Exposure Route	Range	Mean	General Information
8021 Body, whole	42	Not given	6 ng/g Wet wt	Collected Jun-Aug 1980, 1981, or 1982 at Alamosa National Wildlife Refuge, CO. Length 42-61 mm, avg wt 1.2 g. Data also given for mixted species. Colorado GC

ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE
Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717

Mouse, wood
APODEMUS SYLVATICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8022 Liver	6	0.02-0.03 ppm Wet wt	0.021 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8023 Muscle	6	Not detected-0.04 ppm Wet wt	0.012 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION
Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Otter
LUTRA LUTRA

Tissue	Cases Exposure Route	Range	Mean	General Information
8024 Liver	5	Not detected-0.02 ppm Wet wt	0.013 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8025 Muscle	5	Not detected-0.10 ppm Wet wt	0.014 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8026 Body	73	Not given	Trace	Collected in fall of 1980 and spring of 1981. In 11% of total. Maximum permissible level=0.050 mg/kg. Trace levels <0.001 mg/kg. Germany (West), Lahn River GC/MS

BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION

Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8027 Liver	1	Not applicable	46 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES

Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Rabbit
ORYCTOLAGUS CUNICULUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8028 Liver	5	0.01-0.05 ppm Wet wt	0.016 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Raccoon
PROCYON LOTOR

Tissue	Cases Exposure Route	Range	Mean	General Information
8029 Muscle	10	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Limit of detection 0.05 ppm. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION

Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Rat, brown
RATTUS NORVERGICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8030 Liver	5	Not detected-0.02 ppm Wet wt	0.004 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8031 Muscle	5	Not detected-0.01 ppm Wet wt	0.006 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8032 Body	227	Not given	Trace	Collected in fall of 1980 and spring of 1981. In 11% of total. Maximum permissible level=0.050 mg/kg. Trace levels <0.001 mg/kg. Germany (West), Lahn River GC/MS

BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION

Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616

Scorpion, sea
MYOXOCEPHALUS SCORPIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8033 Liver	6	Not detected-15 ug/kg Wet wt	5+/-6 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION

Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Shad
DOROSOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8034 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Shad, gizzard
DOROSOMA CEPEDIANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
8035 Body, whole	4	20-27 ng/g Wet wt	Not given	Collected Jun-Aug 1980, 1981, or 1982 at Flint Hills National Wildlife Refuge, KS. Length 121-151 mm, avg wt 29 g. Data also given for mixed species. Kansas GC
ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Shad, gizzard
DOROSOMA CEPEDIANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
8036 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.01 ug/g b) 0.01 ug/g c) Not detected d) 0.03 ug/g e) 0.01 ug/g f) 0.01 ug/g g) 0.10 ug/g h) 0.08 ug/g Wet wt Geometric	a) 3 composite samples from Lake Verret b) 3 from Lake Fausse Point c) 1 from Little Pigeon Bayou d) 3 from Grand Lake e) 3 from Henderson Lake f) 3 from Bayou Petite Prairie g) 3 from Spring Bayou h) 3 from Raccouri Old River Collected 6/81, 1.4-5.0% lipids, wt 60-227 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Shiner, red
NOTROPIS LUTRENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8037 Body, whole	48	8-10 ng/g Wet wt	Not given	Collected Jun-Aug 1980, 1981, or 1982 at Alamosa National Wildlife Refuge, CO. Length 44-71 mm, avg wt 2.2 g. Data also given for mixed species. Colorado GC
ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717				

Snake, water
NATRIX sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8038 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable	a) Not detected b) Not detected c) Not detected	a) Lake Verret b) Plaquemine-Brule Bayou c) East Franklin Site of collection in 1979. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Sole, lemon
MICROSTOMAS KITT

Tissue	Cases Exposure Route	Range	Mean	General Information
8039 Liver	10	1-3 ug/kg Wet wt	2+/-0.4 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION
Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
8040 Body, whole	16	8-10 ng/g Wet wt	Not given	Collected Jun-Aug 1980, 1981, or 1982 at Arapaho National Wildlife Refuge, CO. Length 56-148 mm, avg wt 15 g. Data also given for mixed species. Colorado GC

ENVIRONMENTAL EXPOSURE; FISHES; PESTICIDE RESIDUES; BODY; POLYCHLORINATED BIPHENYLS; CHLORINE ORGANIC COMPOUNDS; COLORADO; NORTH DAKOTA; AQUATIC; KANSAS; IOWA; COMPARATIVE EVALUATIONS; DIELDRIN; DDT; DDE; DDD; HEXACHLOROCYCLOHEXANE
Martin, D.B.; Hartman, W.A. 1985 Journal of the Association of Official Analytical Chemists 68(4):712-717

Sunfish
LEPOMIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8041 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.01 ug/g b) Not detected c) 0.05 ug/g d) 0.03 ug/g Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Grand Lake c) 1 from Bayou Petite Prairie d) 2 from Spring Bayou Collected 6/81, 0.8-3.2% lipids, wt 55-139 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Cyclohexane, 1,2,3,4,5,6-hexachloro-, alpha- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5beta,6beta)- (9 CI)
319-84-6
C6-H6-Cl6
MW 290.83, MP 159.5-160 C, BP 288 C, VP 0.02 mm Hg at 20 C

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
8042 Body	10	Not given	1.17-0.4 ng/g	Comparison of laboratory- and field-derived bioconcentration factors (BCFs) for 34 chemicals showed predictions based on lab BCFs useful for chemicals with short half-lives but too low for long half-life chemicals where contaminated food is major source. Lake Ontario, Ganaraska River CC; EC
FISHES; ENVIRONMENTAL EXPOSURE; BIOCONCENTRATION; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WATER POLLUTION; POLYCHLORINATED BIPHENYLS Oliver, B.G.; Niimi, A.J. 1985 Environmental Science and Technology 19:842-849				

Wrasse, ballan
LABRUS BERGGYLTA

Tissue	Cases Exposure Route	Range	Mean	General Information
8043 Liver	a) 10 b) 10	Not detected-5 ug/kg Wet wt	1+/-2 ug/kg Wet wt	a) 1977 b) 1982 Year of collection in Sogndalsfjord. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Antelope

Tissue	Cases Exposure Route	Range	Mean	General Information
8044 Liver		Not given	0.05 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

(next page)

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Antelope

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8045 Muscle		Not given	0.04 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Bass, rock
AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8046 Body		Not applicable	0.01 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8047 Body		Not applicable	<0.002 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8048 Body		Not applicable	0.04 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, brown
ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8049 Body		Not applicable	<0.002 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, yellow
ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8050 Body		Not applicable	<0.002 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
8051 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) <0.002 mg/kg b) <0.002 mg/kg c) 0.06 mg/kg d) <0.002 mg/kg e) 0.03 mg/kg f) <0.002 mg/kg g) 0.09 mg/kg h) 0.04 mg/kg i) 0.90 mg/kg	a) Black River, OH, 10/21/81 b) Sheboygan River, WI, 9/30/80 c) Another sample, same as b) d) Menominee River, WI, 8/15/81 e) Kinnickinnic River, WI, 7/15/81 f) Wolf River, WI, 9/15/80 g) Fox River, WI, above DePere, 10/10/80 h) Same, except 11/15/81 i) Fox River, below DePere, 10/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Tissue	Cases Exposure Route	Range	Mean	General Information
8052 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8053 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
8054 Muscle	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8055 Liver		Not given	0.02 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8056 Milk, fat	2	0.009-0.003 mg/kg	0.006 mg/kg	Study also looked at levels in milk products, human milk, fruits and vegetables. All levels below FAO and WHO recommended safe levels. Greece GC/MS
MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; GREECE; CHLORINE ORGANIC COMPOUNDS; HEXACHLOROCYCLOHEXANE; DDT; BIOACCUMULATION Fytianos, K.; Vasilikiotis, G.; Weil, L; Kavlendis, E.; Laskaridis, N. 1985 Bulletin of Environmental Contamination and Toxicology 34:504-508				

Tissue	Cases Exposure Route	Range	Mean	General Information
8057 Muscle		Not given	0.01 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8058 Liver		Not given	0.06 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
8059 Muscle		Not given	0.03 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Crappie
POMOXIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8060 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION
Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8061 Body		Not applicable	0.08 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Crayfish
PROCAMBARUS CLARKII

Tissue	Cases Exposure Route	Range	Mean	General Information
8062 Body, whole	50	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 10 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Fish, black scabbard
APHANOPUS CARBO

Tissue	Cases Exposure Route	Range	Mean	General Information
8063 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected South of Madeira. Deep water (800-1200 m) habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, parrot
SPARISOMA (EUSCARUS) CRETENSE

Tissue	Cases Exposure Route	Range	Mean	General Information
8064 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected from local fish market on Proto Santo, East of Madeira. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Fish, scorpion
SCORPAENA SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
8065 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected off northern coast of Sao Miguel, Azores. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Frog
RANA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8066 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
8067 Muscle	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8068 Liver		Not given	0.02 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
8069 Muscle		Not given	0.02 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Guillemot, common
URIA AALGE

Tissue	Cases Exposure Route	Range	Mean	General Information
8070 Eggs	a) 10 b) 9 c) 7 d) 8	a) Not given b) Not given c) Not given d) Not given	a) 13+/-2 ug/g b) 7+/-2 ug/g c) 6+/-2 ug/g d) 5+/-6 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8071 Eggs	a) 9 b) 11 c) 13 d) 10	a) Not given b) Not given c) Not given d) Not given	a) 20+/-19 ug/g b) 22+/-26 ug/g c) 8+/-3 ug/g d) 33+/-18 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING

Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Heron, yellow-crowned night
NYCTANASSA VIOLACEA

Tissue	Cases Exposure Route	Range	Mean	General Information
8072 Body, whole	10	a) Not given b) Not given c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0.017 ppm b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Limit of detection 0.05 ppm. Mean a) exceeded by S.E. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION

Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Kittiwake, black-legged
RISSA TRIDACTYLA

Tissue	Cases Exposure Route	Range	Mean	General Information
8073 Eggs	a) 11 b) 10 c) 10	a) Not given b) Not given c) Not given	a) 39+/-16 ug/g b) 11+/-4 ug/g c) 4+/-1 ug/g Wet wt	a) East Finnmark b) West Finnmark c) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING

Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8074 Body	73	Not given	Trace	Collected in fall of 1980 and spring of 1981. In 6% of total. Maximum permissible level=0.050 mg/kg. Trace levels <0.001 mg/kg. Germany (West), Lahn River GC/MS

BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION

Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8075 Body		a) Not applicable b) Not applicable	a) <0.002 mg/kg b) 0.06 mg/kg	a) Ashtabula River, OH, 10/28/81 b) Sheboygan River WI, 9/30/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8076 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES

Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Puffin, Atlantic
FRATERCULA ARCTICA

Tissue	Cases Exposure Route	Range	Mean	General Information
8077 Eggs	a) 11 b) 10 c) 10 d) 20	a) Not given b) Not given c) Not given d) Not given	a) 8+/-3 ug/g b) 14+/-4 ug/g c) 8+/-3 ug/g d) 3+/-2 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING

Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Raccoon
PROCYON LOTOR

Tissue	Cases Exposure Route	Range	Mean	General Information
8078 Muscle	10	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Limit of detection 0.05 ppm. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION

Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Razorbill
ALCA TORDA

Tissue	Cases Exposure Route	Range	Mean	General Information
8079 Eggs	9	Not given	15+/-7 ug/g Wet wt	Collected in West Finnmark, 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8080 Body	223	Not given	Trace	Collected in fall of 1980 and spring of 1981. In 6% of total. Maximum permissible level=0.050 mg/kg. Trace levels <0.001 mg/kg. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616				

Shad
DOROSOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8081 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not detected b) Not detected c) Not detected d) Not detected e) Not detected f) Not detected	a) Lake Verret, 1978 b) 1979 c) Plaquemine-Brule Bayou, 1978 d) 1979 e) East Franklin, 1978 f) 1979 Site and year of collection. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC
BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)
319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Shag
PHALACROCORAX ARISTOTELIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8082 Eggs	a) 10 b) 10	a) Not given b) Not given	a) 10+/-4 ug/g b) 4+/-2 ug/g Wet wt	a) East Finnmark b) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING

Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Snake, water
NATRIX sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8083 Body, whole	25	a) Not applicable b) Not applicable c) Not applicable	a) Not detected b) Not detected c) Not detected	a) Lake Verret b) Plaquemine-Brule Bayou c) East Franklin Site of collection in 1979. Each determination is average of 5 groups of 5 individuals. Limit of detection 0.05 ppm. Louisiana GC-EC

BODY; MUSCLES; HERONS; FISHES; FROGS; SNAKES; CRAYFISH; RACCOONS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINE ORGANIC COMPOUNDS; DDT; DDE; DDD; DIELDRIN; POLYCHLORINATED BIPHENYLS; NONACHLOR; PESTICIDE RESIDUES; BIOACCUMULATION

Haesloop, U.; Schirmer, M. 1985 Bulletin of Environmental Contamination and Toxicology 34:832-841

Sucker, redhorse
MOXOSTOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8084 Body		Not applicable	0.06 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Cyclohexane, 1,2,3,4,5,6-hexachloro-, beta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2beta,3alpha,4beta,5alpha,6beta)- (9 CI)

319-85-7
C6-H6-Cl6
MW 290.83, MP 314-315 C (sublimes), BP 60 C at 0.58 mm Hg, VP 0.005 mm Hg at 20 C

Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
8085 Body		Not applicable	<0.002 mg/kg	Chequamegon Bay, Lake Superior, WI, 8/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Walleye
STIZOSTEDION VITREUM VITREUM

Tissue	Cases Exposure Route	Range	Mean	General Information
8086 Body		a) Not applicable b) Not applicable c) Not applicable	a) 0.002 mg/kg b) <0.002 mg/kg c) 0.01 mg/kg	a) Wolf River, WI, 9/15/80 b) Fox River, WI, below DePere, 10/15/80 c) Chequamegon Bay, Lake Superior, WI, 8/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)

319-86-8
C6-H6-Cl6
MW 290.83, MP 141.5-142.0 C, BP 60 C at 0.34 mm Hg, VP 0.02 mm Hg at 20 C

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
8087 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES

Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G ; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)
319-86-8
C6-H6-Cl6
MW 290.83, MP 141.5-142.0 C, BP 60 C at 0.34 mm Hg, VP 0.02 mm Hg at 20 C

Fish, black scabbard
APHANOPUS CARBO

Tissue	Cases Exposure Route	Range	Mean	General Information
8088 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected South of Madeira. Deep water (800-1200 m) habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, parrot
SPARISOMA (EUSCARUS) CRETENSE

Tissue	Cases Exposure Route	Range	Mean	General Information
8089 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected from local fish market on Proto Santo, East of Madeira. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, scorpion
SCORPAENA SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
8090 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected off northern coast of Sao Miguel, Azores. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, delta- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3alpha,4beta,5alpha,6beta)- (9 CI)
319-86-8
C6-H6-Cl6
MW 290.83, MP 141.5-142.0 C, BP 60 C at 0.34 mm Hg, VP 0.02 mm Hg at 20 C

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8091 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Antelope

Tissue	Cases Exposure Route	Range	Mean	General Information
8092 Liver		Not given	0.05 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. *Nigeria* GLC
8093 Muscle		Not given	0.04 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
8094 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.01 ug/g b) Not detected c) Not detected d) Not detected Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Bayou Petite Prairie c) 2 from Spring Bayou d) 3 from Raccouri Old River Collected 6/81, 2.3-6.6% lipids, wt 307-431 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Bass, rock
AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8095 Body		Not applicable	<0.002 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bat

Tissue	Cases Exposure Route	Range	Mean	General Information
8096 Adipose				Review. Part of extensive coverage of organochlorines and metals found in surveys and some experimental feeding studies. 25 species in 5 countries were surveyed. USA: Nigeria; England; Australia; Mexico
8097 Body, whole				Review. Part of extensive coverage of organochlorines and metals found in surveys and some experimental feeding studies. 25 species in 5 countries were surveyed. USA: Nigeria; England; Australia; Mexico
ENVIRONMENTAL EXPOSURE; REVIEW; DELIBERATE EXPOSURE; TERRESTRIAL; BATS; CARCASS; BODY; LIVER; ADIPOSE TISSUE; BRAIN; GASTROINTESTINAL SYSTEM; MAMMARY GLANDS; MILK; HEART; LUNGS; KIDNEYS; SKIN; MUSCLES; HAIR; PESTICIDES; PESTICIDE RESIDUES; INSECTICIDES; DDT; DDD; DDE; DIELDRIN; LINDANE; POLYCHLORINATED BIPHENYLS; MIREX; HEPTACHLOR EPOXIDE; OXYCHLORDANE; SELENIUM; MERCURY; LEAD; METALS Clark, D.R. 1981 U.S. Department of the Interior, Special Scientific Report - Wildlife No. 235, 27 pp.				

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8098 Body		Not applicable	0.07 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Boar
SUS SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
8099 Liver	5	Not detected-0.01 ppm Wet wt	0.007 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8100 Muscle	5	Not detected-0.01 ppm Wet wt	0.007 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Bowfin
AMIA CALVA

Tissue	Cases Exposure Route	Range	Mean	General Information
8101 Body, whole		a) Not given b) Not given c) Not given	a) Not detected b) Not detected c) 0.01 ug/g Wet wt Geometric	a) 1 composite sample from lake Verret b) 1 from Lake Fausse Point c) 1 from Bayou Petite Prairie Collected 6/81, 2.2-5.6% lipids, wt 1310-2000 g. Detection limits not given. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Buffalo
BUBALUS BUBALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8102 Adipose	17	0.011-0.209 ppm Wet wt	0.058+/-0.011 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
8103 Bone marrow	5	0.041-0.198 ppm Wet wt	0.121-0.033 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
8104 Brain	16	0.007-0.016 ppm Wet wt	0.012+/-0.001 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
8105 Liver	17	0.005-0.022 ppm Wet wt	0.012+/-0.001 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
8106 Muscle	22	0.001-0.015 ppm Wet wt	0.004+/-0.001 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION

Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Buffalo, smallmouth
ICTIOBUS BUBALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8107 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.02 ug/g b) Not detected c) Not detected d) Not detected Wet wt Geometric	a) 2 composite samples from Lake Fausse Point b) 1 from Bayou Petite Prairie c) 1 from Spring Bayou d) 1 from Raccouri Old River Collected 6/81, 0.5-8.8% lipids, wt 687-1030 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8108 Body		Not applicable	0.01 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, brown
ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8109 Body		Not applicable	<0.002 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Bullhead, yellow
ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8110 Body		Not applicable	<0.002 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Carp
CYPRINUS CARPIO

Tissue	Cases Exposure Route	Range	Mean	General Information
8111 Body		a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 0.005 mg/kg b) 0.08 mg/kg c) 0.08 mg/kg d) <0.002 mg/kg e) 0.01 mg/kg f) <0.002 mg/kg g) <0.002 mg/kg h) <0.002 mg/kg i) <0.002 mg/kg	a) Black River, OH, 10/21/81 b) Sheboygan River, WI, 9/30/80 c) Another sample, same as b) d) Menominee River, WI, 8/15/81 e) Kinnickinnic River, WI, 7/15/81 f) Wolf River, WI, 9/15/80 g) Fox River, WI, above DePere, 10/10/80 h) Same, except 11/15/81 i) Fox River, below DePere, 10/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Tissue	Cases Exposure Route	Range	Mean	General Information
8112 Liver	1	Not applicable	7 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES

Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Catfish
ANARHICHAS LUPUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8113 Liver	2	1-2 ug/kg Wet wt	2+/-1 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION
Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Tissue	Cases Exposure Route	Range	Mean	General Information
8114 Muscle	8	0.22-1.66 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION
Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254

Catfish, channel
ICTALURUS PUNCTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8115 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.01 ug/g b) Not detected c) 0.01 ug/g d) 0.01 ug/g e) 0.01 ug/g f) 0.01 ug/g Wet wt Geometric	a) 3 composite samples from Lake Verret b) 1 from lake Fausse Point c) 1 from Little Pigeon Bayou d) 3 from Grand Lake e) 1 from Henderson Lake f) 3 from Raccouri Old River Collected 6/81, 1.3-6.5% lipids, wt 57-317 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Catfish, mud
CLARIAS LAZERA

Tissue	Cases Exposure Route	Range	Mean	General Information
8116 Muscle	11	0.14-1.32 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION
Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8117 Adipose		0.005-0.830 ppm Fat basis	0.116 ppm Fat basis	Samples purchased from Baghdad meat markets in 1983. Iraq GC

ADIPOSE TISSUE; CATTLE; SHEEP; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; IRAQ; HEPTACHLOR; DIELDRIN; DDT; LINDANE; BIOACCUMULATION
Al-Omar, M.; Al-Bassomy, M.; Al-Ogaily, N.; Al-Din Shebl, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:509-512

Tissue	Cases Exposure Route	Range	Mean	General Information
8118 Liver		Not given	0.03 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES
Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738

Tissue	Cases Exposure Route	Range	Mean	General Information
8119 Milk, fat	2	Not applicable	0.022 mg/kg	Study also looked at levels in milk products, human milk, fruits and vegetables. All levels below FAO and WHO recommended safe levels. Greece GC/MS

MILK; CATTLE; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; GREECE; CHLORINE ORGANIC COMPOUNDS; HEXACHLOROCYCLOHEXANE; DDT; BIOACCUMULATION
Fytianos, K.; Vasilikiotis, G.; Weil, L; Kavlendis, E.; Laskaridis, N. 1985 Bulletin of Environmental Contamination and Toxicology 34:504-508

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8120 Adipose	a) 95 b) 81 c) 49 d) 30 e) 102 f) 180	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 9+/-18 ug/kg b) 2+/-11 ug/kg c) <1 ug/kg d) <1 ug/kg e) 0.7+/-2 ug/kg f) 0.4+/-0.6 ug/kg	a) 1969-70, 19 composite samples b) 1971-72, 21 composite samples *c) 1973-74, 17 composite samples* d) 1975-76, 9 composite samples e) 1979-80, 21 composite samples f) 1981-82, 50 composite samples Abdominal fat. Canada, Ontario GC; GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; ADIPOSE TISSUE; EGGS; CHICKENS; CANADA; FOOD CONTAMINATION; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; CHLORDANE; LINDANE; POLYCHLORINATED BIPHENYLS; BIRDS

Frank, R.; Rasper, J.; Braun, H.E.; Ashton, G. 1985 Journal of the Association of Official Analytical Chemists 68(1):124-129

Tissue	Cases Exposure Route	Range	Mean	General Information
8121 Adipose	3	0.075-0.120 ppm Wet wt	0.090 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA

Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13

Tissue	Cases Exposure Route	Range	Mean	General Information
8122 Adipose	22	0.284-4.150 ppm Wet wt	1.217+/-0.188 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION

Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8123 Blood, plasma	3	0.002-0.003 ppm Wet wt	0.002 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8124 Brain	3	0.001-0.002 ppm Wet wt	0.001 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA

Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13

Tissue	Cases Exposure Route	Range	Mean	General Information
8125 Brain	19	09.012-0.051 ppm Wet wt	0.027+/-0.002 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION

Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106

Tissue	Cases Exposure Route	Range	Mean	General Information
8126 Eggs	a) 120 b) 124 c) 64 d) 10 e) 101	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 5+/-20 ug/kg b) <1 ug/kg c) <1 ug/kg d) 2.4+/-2.0 ug/kg e) <1 ug/kg	a) 1969-70, 30 composite samples b) 1971-72, 31 composite samples c) 1973-74, 22 composite samples d) 1975-76, 4 composite samples e) 1979-80, 31 composite samples Fat. Canada, Ontario GC; GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; ADIPOSE TISSUE; EGGS; CHICKENS; CANADA; FOOD CONTAMINATION; CHLORINE ORGANIC COMPOUNDS; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; CHLORDANE; LINDANE; POLYCHLORINATED BIPHENYLS; BIRDS

Frank, R.; Rasper, J.; Braun, H.E.; Ashton, G. 1985 Journal of the Association of Official Analytical Chemists 68(1):124-129

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8127 Heart	3	Not given	0.007 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8128 Kidney	3	Not given	0.004 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA

Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13

Tissue	Cases Exposure Route	Range	Mean	General Information
8129 Liver		Not given	0.05 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES

Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738

Tissue	Cases Exposure Route	Range	Mean	General Information
8130 Liver	3	Not given	0.004 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA

Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8131 Liver	20	0.004-0.091 ppm Wet wt	0.049+/-0.004 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

Tissue	Cases Exposure Route	Range	Mean	General Information
8132 Lung	3	Not given	0.007 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
8133 Muscle		Not given	0.03 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC
ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738				

Tissue	Cases Exposure Route	Range	Mean	General Information
8134 Muscle	3	Not given	0.010 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8135 Muscle	10	0.002-0.037 ppm Wet wt	0.017+/-0.008 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION

Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106

Tissue	Cases Exposure Route	Range	Mean	General Information
8136 Spleen	3	Not given	0.009 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA

Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13

Cod
GADUS MORHUA

Tissue	Cases Exposure Route	Range	Mean	General Information
8137 Liver	18	6-16 ug/kg Wet wt	10+/-3 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION

Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Crab, land
CARDISOMA GUANHUMI

Tissue	Cases Exposure Route	Range	Mean	General Information
8138 Muscle		Not given	4.5 ppb	Analyzed in 24 composite samples representing 512 crabs. Only 1/24 had detectable level, size class 5-7.5 cm carapace width collected from Guayanilla Bay area. Other samples collected from Guanajibo Valley and Virgin Islands National Park had no detectable levels. Puerto Rico GC-EC
CRUSTACEANS; ENVIRONMENTAL EXPOSURE; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; MUSCLES; LINDANE; PUERTO RICO Rojas, H. 1986 Bulletin of Environmental Contamination and Toxicology 37:120-124				

Crappie, black
POMOXIS NIGROMACULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8139 Body		Not applicable	<0.02 mg/kg	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Tissue	Cases Exposure Route	Range	Mean	General Information
8140 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.02 ug/g b) Not detected c) 0.02 ug/g d) Not detected e) 0.01 ug/g f) 0.01 ug/g Wet wt Geometric	a) 3 composite samples from Lake Fausse Point b) 3 from Little Pigeon Bayou c) 2 from Henderson Lake d) 1 from Bayou Petite Prairie e) 2 from Spring Bayou f) 3 from Raccouri Old River Collected 6/81, 1.3-4.1% lipids, wt 92-251 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Crow, house
CORVUS SPLENDENS

Tissue	Cases Exposure Route	Range	Mean	General Information
8141 Adipose	3	3.996-9.707 ppm Wet wt	6.550 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8142 Blood, plasma	3	0.006-0.024 ppm Wet wt	0.011 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8143 Brain	3	0.010-0.016 ppm Wet wt	0.014 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8144 Heart	3	Not given	0.052 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8145 Kidney	3	Not given	0.031 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8146 Liver	3	Not given	0.032 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8147 Lung	3	Not given	0.030 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8148 Muscle	3	Not given	0.047 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8149 Spleen	3	Not given	0.024 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Deer, fallow
DAMA DAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
8150 Liver	8	Not detected-0.02 ppm Wet wt	0.006 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Deer, red
CERVUS ELAPHUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8151 Liver	8	Not detected-0.02 ppm Wet wt	0.008 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Dove, rock
COLUMBA LIVIA

Tissue	Cases Exposure Route	Range	Mean	General Information
8152 Blood, plasma	3	0.015-0.019 ppm Wet wt	0.016 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8153 Brain	3	0.014-0.034 ppm Wet wt	0.020 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

(next page)

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Dove, rock
COLUMBA LIVIA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8154 Heart	3	Not given	0.071 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8155 Kidney	3	Not given	0.078 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8156 Liver	3	Not given	0.193 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8157 Lung	3	Not given	0.071 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8158 Muscle	3	Not given	0.078 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Egret, cattle
BUBULCUS IBIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8159 Adipose	3	3.567-6.638 ppm Wet wt	4.873 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8160 Blood, plasma	3	0.040-0.057 ppm Wet wt	0.048 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

(next page)

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Egret, cattle
BUBULCUS IBIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8161 Brain	3	0.042-0.080 ppm Wet wt	0.053 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8162 Heart	3	Not given	0.114 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8163 Kidney	3	Not given	0.161 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8164 Liver	3	Not given	0.178 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8165 Lung	3	Not given	0.116 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8166 Muscle	3	Not given	0.142 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Fish

Tissue	Cases Exposure Route	Range	Mean	General Information
8167 Body		0.00-0.03 ug/g Wet wt	Not given	Study of 315 composite samples (3-5 adults of species) from 107 stations in more than 45 states, 1980-81. Range from total of 62 species. Maximum value in lipid wt=0.4 ug/g. Part of *National Pesticides Monitoring Program*. United States GLC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; UNITED STATES; PESTICIDES; PESTICIDE RESIDUES; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; DIELDRIN; CHLORDANE; HEXACHLOROBENZENE; TOXAPHENE; COMPARATIVE EVALUATIONS; WATER POLLUTION; BIOLOGICAL MONITORING Schmitt, C.J.; Zajicek, J.L.; Ribick, M.A. 1985 Archives of Environmental Contamination and Toxicology 14:225-260				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Fish (A. spinifer)
ARGYROPS SPINIFER

Tissue	Cases Exposure Route	Range	Mean	General Information
8168 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 1.52 ug/kg b) 40.42 ug/kg c) 10.22 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. *Egypt* GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Fish (S. auratus)
SPARUS AURATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8169 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 0.1 ug/kg b) 45.3 ug/kg c) 12.97 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Fish (S. aurita)
SARDINELLA AURITA

Tissue	Cases Exposure Route	Range	Mean	General Information
8170 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 0.1 ug/kg b) 1.22 ug/kg c) 0.1 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Fish (S. vulgaris)
SOLEA VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8171 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 20.4 ug/kg b) 14.7 ug/kg c) 28.15 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES
El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Fish (Saurida sp.)
SAURIDA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8172 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 0.1 ug/kg b) 41.14 ug/kg c) 0.1 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC

MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES
El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227

Fish (T. zillii)
TILAPIA ZILLII

Tissue	Cases Exposure Route	Range	Mean	General Information
8173 Muscle	a) 20 b) 14	a) 0.0-2.1 ug/kg b) 0.0-1.8 ug/kg Wet wt	a) 1.07 ug/kg b) 0.6 ug/kg Wet wt	a) El-Manzala Lake b) El-Burullus Lake Nile Delta lakesite of collection. Proposed species studied be used as biomonitors for pesticide contamination. Egypt GC

MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; EGYPT; PESTICIDES; LINDANE; DDT; DDD; DDE; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; BIOLOGICAL MONITORING
Badawy, M.I.; El-Dib, M.A. 1984 Environment International 10:3-8

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Fish (Tilapia)
TILAPIA ZILLII

Tissue	Cases Exposure Route	Range	Mean	General Information
8174 Muscle	6	0.33-0.72 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Fish (Trichurus sp.)
TRICHURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8175 Muscle	a) 2 b) 2 c) 2	a) Not given b) Not given c) Not given	a) 0.1 ug/kg b) 40.4 ug/kg c) 11.57 ug/kg	a) April, 1983 b) June, 1983 c) September, 1983 Sampling dates. Caught 3-5 km from Port-Said. Detection limit 0.1 ug/kg. Egypt GLC
MUSCLES; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; EGYPT; HEXACHLOROBENZENE; LINDANE; ALDRIN; DDE; DDD; DDT; POLYCHLORINATED BIPHENYLS; BIOACCUMULATION; INDUSTRIAL POLLUTION; WATER POLLUTION; CHLORINE ORGANIC COMPOUNDS; INSECTICIDES El-Dib, M.A.; Badawy, M.I. 1985 Bulletin of Environmental Contamination and Toxicology 34:216-227				

Fish, African bony tongue
HETEROTIS NILOTICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8176 Muscle	5	0.11-0.71 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Fish, black scabbard
APHANOPUS CARBO

Tissue	Cases Exposure Route	Range	Mean	General Information
8177 Liver	1	Not applicable	<0.1 mg/kg Lipid basis	Collected South of Madeira. Deep water (800-1200 m) habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, elephant snout
MORMYRUS MACROPHTHALMUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8178 Muscle	4	0.12-3.11 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Fish, parrot
SPARISOMA (EUSCARUS) CRETENSE

Tissue	Cases Exposure Route	Range	Mean	General Information
8179 Liver	1	Not applicable	1 mg/kg Lipid basis	Collected from local fish market on Proto Santo, east of Madeira. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Fish, scorpion
SCORPAENA SCROFA

Tissue	Cases Exposure Route	Range	Mean	General Information
8180 Liver	1	Not applicable	12 mg/kg Lipid basis	Collected off northern coast of Sao Miguel, Azores. Surface water habitat. Atlantic Ocean GC-EC
LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267				

Fish, snake head
CHANNA OBSCURA

Tissue	Cases Exposure Route	Range	Mean	General Information
8181 Muscle	5	0.14-0.32 ppm Fat basis	Not given	Collected 1981-1982, rivers in Bendel State, Southern Nigeria. GC-EC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; NIGERIA; DDT; DDD; DDE; HEXACHLOROBENZENE; LINDANE; PESTICIDES; PESTICIDE RESIDUES; BIOACCUMULATION; WATER POLLUTION Atuma, S.S.; Eigbe, C.O. 1985 International Journal of Environmental Studies 24:251-254				

Flounder
PLATICHTHYS FLESUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8182 Liver	10	Not detected-2 ug/kg Wet wt	1+/-1 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Gar, spotted
LEPISOSTEUS OCULATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8183 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) Not detected b) Not detected c) Not detected d) 0.03 ug/g e) 0.01 ug/g f) Not detected g) Not detected h) Not detected Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Lake Fausse Point c) 3 from Little Pigeon Bayou d) 1 from Grand Lake e) 2 from Henderson Lake f) 1 from Bayou Petite Prairie g) 1 from Spring Bayou h) 1 from Raccouri Old River Collected 6/81, 1.6-12.9% lipids, wt 303-860 g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8184 Adipose	16	0.054-0.347 ppm Wet wt	0.134+/-0.024 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION
Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8185 Blood	a) 8 b) 8 c) 8 d) 8 e) 6 f) 6 g) 4 h) 4 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given	a) 117+/-18 ppb b) 112+/-16 ppb c) 119+/-16 ppb d) 9.7+/-4.8 ppb e) 2.1+/-0.7 ppb f) 1.1+/-0.5 ppb g) 0.5+/-0.3 ppb h) Not detected S.E.	a) Day 1 after initial dose of 6 mg/kg given for 5 d b) Day 3 c) Day 5 d) Day 7 e) Day 10 f) Day 15 g) Day 20 h) Day 30 Not detected in 9 on day 0 and in 2 on days 45 and 60. Detection limit 0.5 ppb. No clinical evidence of toxicity. Tanzania GC-EC

DELIBERATE EXPOSURE; TERRESTRIAL; GOATS; LINDANE; BLOOD; MILK; LIVER; MUSCLES; ADIPOSE TISSUE; RABBITS; TANZANIA; FOOD CONTAMINATION; PESTICIDES; PESTICIDE RESIDUES; INGESTION

Mosha, R.D.; Gyrd-Hansen, N.; Kraul, I. 1986 Bulletin of Environmental Contamination and Toxicology 35:518-522

Tissue	Cases Exposure Route	Range	Mean	General Information
8186 Bone marrow	8	0.036-0.123 ppm Wet wt	0.063+/-0.013 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
8187 Brain	14	0.008-0.018 ppm Wet wt	0.010+/-0.001 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION

Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106

Tissue	Cases Exposure Route	Range	Mean	General Information
8188 Liver		Not given	0.04 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES

Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8189 Liver	18	0.006-0.014 ppm Wet wt	0.009+/-0.001 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION

Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106

Tissue	Cases Exposure Route	Range	Mean	General Information
8190 Milk	a) 8 b) 8 c) 8 d) 8 e) 6 f) 6 g) 4 h) 4 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given	a) 941+/-129 ppb b) 958+/-113 ppb c) 883+/-142 ppb d) 72+/-25 ppb e) 38+/-22 ppb f) 17+/-13 ppb g) 3.4+/-1.9 ppb h) 1.0+/-0.6 ppb S.E.	a) Day 1 after initial dose of 6 mg/kg given for 5 d b) Day 3 c) Day 5 d) Day 7 e) Day 10 f) Day 15 g) Day 20 h) Day 30 Not detected in 9 on day 0 and in 2 on days 45 and 60. Detection limit 0.5 ppb. No clinical evidence of toxicity. Tanzania GC-EC

DELIBERATE EXPOSURE; TERRESTRIAL; GOATS; LINDANE; BLOOD; MILK; LIVER; MUSCLES; ADIPOSE TISSUE; RABBITS; TANZANIA; FOOD CONTAMINATION; PESTICIDES; PESTICIDE RESIDUES; INGESTION

Mosha, R.D.; Gyrd-Hansen, N.; Kraul, I. 1986 Bulletin of Environmental Contamination and Toxicology 35:518-522

Tissue	Cases Exposure Route	Range	Mean	General Information
8191 Muscle		Not given	0.05 mg/kg	Extracted fresh, expressed as mg/kg of extractable lipid. Meat samples collected at random from market places in southern Nigeria, 1982-83. Nigeria GLC

ENVIRONMENTAL EXPOSURE; PESTICIDE RESIDUES; NIGERIA; TERRESTRIAL; MEAT; FOOD CONTAMINATION; MUSCLES; LIVER; ANTELOPES; CHICKENS; CATTLE; DDE; DDD; DDT; HEXACHLOROCYCLOHEXANE; HEXACHLOROBENZENE; PESTICIDES

Atuma, S.S. 1985 Bulletin of Environmental Contamination and Toxicology 35:735-738

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Goat
CAPRA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8192 Muscle	24	0.003-0.007 ppm Wet wt	0.005+/-0.001 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.001 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

Guillemot, common
URIA AALGE

Tissue	Cases Exposure Route	Range	Mean	General Information
8193 Eggs	a) 10 b) 9 c) 7 d) 8	a) Not given b) Not given c) Not given d) Not given	a) Not detected b) 2+/-0 ug/g c) 1+/-0 ug/g d) Not detected Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Limits of detection 0.002-0.007 ug/g. Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Gull, herring
LARUS ARGENTATUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8194 Eggs	a) 9 b) 11 c) 13 d) 10	a) Not given b) Not given c) Not given d) Not given	a) 15+/-14 ug/g b) 4+/-3 ug/g c) 6+/-6 ug/g d) 14+/-13 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Gull, ring-billed
LARUS DELAWARENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8195 Brain	1	Not applicable	0.11 ug/g Wet wt	From group found dead or dying, Umatilla National Wildlife Refuge, 1989. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Haddock
MELANOGRAMMUS AEGLEFINUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8196 Liver	7	4-15 ug/kg Wet wt	9+/-4 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Hare
LEPUS EROPAUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8197 Adipose	26	Not given	0.121 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 12 of 26. Application permitted with few restrictions. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Hare, brown
LEPUS CAPENSIS

Tissue	Cases *Exposure Route*	*Range*	*Mean*	General Information
8198 Liver	5	Not detected-0.01 ppm Wet wt	0.003 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain AAS
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Kite, pariah
MILVUS MIGRANS

Tissue	Cases Exposure Route	Range	Mean	General Information
8199 Adipose	3	1.182-8.096 ppm Wet wt	2.876 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8200 Blood, plasma	3	0.020-0.051 ppm Wet wt	0.028 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8201 Brain	3	0.009-0.019 ppm Wet wt	0.012 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8202 Heart	3	Not given	0.042 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8203 Kidney	3	Not given	0.031 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8204 Liver	3	Not given	0.032 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

(next page)

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Kite, pariah
MILVUS MIGRANS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8205 Lung	3	Not given	0.040 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8206 Muscle	3	Not given	0.106 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8207 Spleen	3	Not given	0.038 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Kittiwake, black-legged
RISSA TRIDACTYLA

Tissue	Cases Exposure Route	Range	Mean	General Information
8208 Eggs	a) 11 b) 10 c) 10	a) Not given b) Not given c) Not given	a) 4+/-2 ug/g b) 3+/-2 ug/g c) Not detected Wet wt	a) East Finnmark b) West Finnmark c) Lofoten Limits of detection, 0.002-0.007 ug/g. Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Lynx, pardel
LYNX PARDINA

Tissue	Cases Exposure Route	Range	Mean	General Information
8209 Liver	5	0.01-0.02 ppm Wet wt	0.016 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8210 Muscle	5	Not detected-0.01 ppm Wet wt	0.006 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Magpie, black-billed
PICA PICA

Tissue	Cases Exposure Route	Range	Mean	General Information
8211 Brain	1	0.13-0.61 ug/g Wet wt	0.17 ug/g	From group found dead or dying, Umatilla National Wildlife Refuge, 1978. Oregon; Washington GLC
ENVIRONMENTAL EXPOSURE; BIRDS; WATERFOWL; TERRESTRIAL; AQUATIC; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; INDUSTRIAL POLLUTION; DDE; HEPTACHLOR EPOXIDE; OXYCHLORDANE; NONACHLOR; HEXACHLOROBENZENE; DIELDRIN; ENDRIN; CHLORDANE; POLYCHLORINATED BIPHENYLS; EGGS; BRAIN Blus, L.J.; Henny, C.J.; Krynitsky, A.J. 1986 Science of the Total Environment 46:73-81				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Midge
CHIRONOMUS RIPARIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8212 Body	1440	a) 2-55 ppb b) 2-75 ppb c) 2-72 ppb	a) Not given b) Not given c) Not given	a) 0.5 and 48 hr, pH of water 4 b) 0.5 and 48 hr, pH 6 c) 0.5 and 24 hr, pH 8 Amounts of radioactivity in 4th instar larvae. Water concentration 25-30 ppb. Labelled with C-14. 15 animals/time point. Ranges of means (4 replicates of each pH level). Uptake of radioactivity significantly less at pH 4. Equal amounts at equilibrium (24-48 hr) at pH 6 and 8, but greater % of parent compound, as compared to polar metabolites, found at pH 6 than at pH 8. Toxicity therefore significantly higher at pH6. Values estimated from figure. Scintillation counting
BODY; AQUATIC; INSECTS; DELIBERATE EXPOSURE; JUVENILES; CHLORINE ORGANIC COMPOUNDS; PESTICIDES; BIOACCUMULATION; METABOLITES				
Fisher, S.W. 1985 Ecotoxicology and Environmental Safety 10:202-208				

Mouse, wood
APODEMUS SYLVATICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8213 Liver	6	0.04-0.05 ppm Wet wt	0.049 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8214 Muscle	6	0.01-0.05 ppm Wet wt	0.026 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION				
Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Mullet
MUGIL CEPHALICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8215 Muscle	a) 10 b) 12 c) 3 d) 12	a) <0.1-<0.1 ug/kg b) <0.1-<0.1 ug/kg c) 0.0-7.0 ug/kg d) <0.1-<0.1 ug/kg Wet wt	a) <0.1 ug/kg b) <0.1 ug/kg c) 2.6 ug/kg d) <0.1 ug/kg Wet wt	a) El-Manzala Lake b) El-Burullus Lake c) Idku Lake d) Maryut Lake Nile Delta lakesite of collection. Propose that species studied used as biomonitors for pesticide contamination. Egypt GC
MUSCLES; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; EGYPT; PESTICIDES; LINDANE; DDT; DDD; DDE; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION; BIOLOGICAL MONITORING Badawy, M.I.; El-Dib, M.A. 1984 Environment International 10:3-8				

Otter
LUTRA LUTRA

Tissue	Cases Exposure Route	Range	Mean	General Information
8216 Kidney	1	Not applicable	0.3 mg/kg Fat wt	Part of group collected from various sites between 12/82 and 3/85. Mean calculated by extractor. Great Britain GC-EC
8217 Liver	11	0.1-11.5 mg/kg Fat wt	3.1 mg/kg Fat wt	From group of 15, 3 with undetectable levels (limits not given) and 1 with trace level. Collected from various sites throughout Britain between 12/82 and 3/85. Mean calculated by extractor. Great Britain GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; OTTERS; LIVER; MUSCLES; KIDNEYS; EMBRYOS; POLYCHLORINATED BIPHENYLS; LINDANE; DIELDRIN; DDE; DDD; DDT; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; UNITED KINGDOM Mason, C.F.; Ford, T.C.; Last, N.I. Bulletin of Environmental Contamination and Toxicology 36:656-661				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Otter
LUTRA LUTRA

Tissue	Cases Exposure Route	Range	Mean	General Information
8218 Liver	5	0.01-0.02 ppm Wet wt	0.018 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Tissue	Cases Exposure Route	Range	Mean	General Information
8219 Muscle	8	0.3-19.0 mg/kg Fat wt	5.3 mg/kg Fat basis	From group of 14, 5 with undetectable levels (limits not given) and 1 with trace level. Collected from various sites throughout Britain between 12/82 and 3/85. Mean calculated by extractor. Great Britain GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; OTTERS; LIVER; MUSCLES; KIDNEYS; EMBRYOS; POLYCHLORINATED BIPHENYLS; LINDANE; DIELDRIN; DDE; DDD; DDT; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; UNITED KINGDOM

Mason, C.F.; Ford, T.C.; Last, N.I. Bulletin of Environmental Contamination and Toxicology 36:656-661

Tissue	Cases Exposure Route	Range	Mean	General Information
8220 Muscle	5	Not detected-0.04 ppm Wet wt	0.013 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Partridge
PERDIX PERDIX

Tissue	Cases Exposure Route	Range	Mean	General Information
8221 Adipose	16	Not given	0.052 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 6 of 17. Application permitted with few restrictions. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Perch
PERCA FLUVIATILIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8222 Body	73	0.0-0.002 mg/kg	0.001 mg/kg	Collected in fall of 1980 and spring of 1981. In 31% of total. Maximum permissible level=0.200 mg/kg. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616				

Pheasant, ring-necked
PHASIANUS COLCHICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8223 Adipose	4	Not given	0.155 mg/kg	Sedentary populations from agricultural biotype with no industry present. Detectable levels in 3 of 4. Application permitted with few restrictions. Germany, West GC
ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Pike, northern
ESOX LUCIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8224 Body		a) Not applicable b) Not applicable	a) 0.12 mg/kg b) 0.08 mg/kg	a) Ashtabula River, OH, 10/28/81 b) Sheboygan River WI, 9/30/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Tissue	Cases Exposure Route	Range	Mean	General Information
8225 Liver	1	Not applicable	8 mg/kg Lipid basis	Collected at Lake Sete Cidades, Sao Miguel, Azores. Atlantic Ocean GC-EC

LIVER; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; ATLANTIC OCEAN; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; POLYCHLORINATED BIPHENYLS; PESTICIDES; NONACHLOR; OXYCHLORDANE; DIELDRIN; BIOACCUMULATION; WATER POLLUTION; PESTICIDE RESIDUES

Kramer, W.; Buchert, H.; Reuter, U.; Biscoito, M.; Maul, D.G.; Le Grand, G.; Ballschmiter, K. 1985 Chemosphere 13(11):1255-1267

Puffin, Atlantic
FRATERCULA ARCTICA

Tissue	Cases Exposure Route	Range	Mean	General Information
8226 Eggs	a) 11 b) 10 c) 10 d) 20	a) Not given b) Not given c) Not given d) Not given	a) 2+/-1 ug/g b) 2+/-1 ug/g c) 2+/-2 ug/g d) 3+/-2 ug/g Wet wt	a) East Finnmark b) West Finnmark c) South Troms/North Nordland d) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC

CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING

Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Rabbit

Tissue	Cases Exposure Route	Range	Mean	General Information
8227 Adipose	a) 6 b) 4 c) 2 Ingestion	a) Not given b) Not given c) Not given	a) 42,000 ppb b) 15,000 ppb c) 5,750 ppb	a) Day 7 b) Day 15 c) Day 30 Not detected in 7 on day 0. Data from 1984 MVM-dissertation, (Sokoine Univ Agric, Tanzania) by R.D. Mosha. Tanzania GC-EC
8228 Blood	a) 6 b) 6 c) 6 d) 6 e) 4 f) 4 g) 2 h) 2 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given h) Not given	a) 36.1+/-4.1 ppb b) 92.6+/-8.2 ppb c) 112+/-5 ppb d) 68.5+/-6.1 ppb e) 35.6+/-4.7 ppb f) 33.5+/-3.5 ppb g) 28.2 ppb h) 11.1 ppb S.E.	a) Day 1 after initial dose of 6 mg/kg given for 5 d b) Day 3 c) Day 5 d) Day 7 e) Day 10 f) Day 15 g) Day 20 h) Day 30 Not detected in 7 on day 0. Data from 1984 MVM-dissertation, (Sokoine Univ Agric, Tanzania) by R.D. Mosha. Tanzania GC-EC
8229 Liver	a) 6 b) 4 c) 2 Ingestion	a) Not given b) Not given c) Not given	a) 875 ppb b) 175 ppb c) 190 ppb	a) Day 7 b) Day 15 c) Day 30 Not detected in 7 on day 0. Data from 1984 MVM-dissertation, (Sokoine Univ Agric, Tanzania) by R.D. Mosha. Tanzania GC-EC

DELIBERATE EXPOSURE; TERRESTRIAL; GOATS; LINDANE; BLOOD; MILK; LIVER; MUSCLES; ADIPOSE TISSUE; RABBITS; TANZANIA; FOOD CONTAMINATION; PESTICIDES; PESTICIDE RESIDUES; INGESTION

Mosha, R.D.; Gyrd-Hansen, N.; Kraul, I. 1986 Bulletin of Environmental Contamination and Toxicology 35:518-522

Tissue	Cases Exposure Route	Range	Mean	General Information
8230 Liver	5	0.01-0.02 ppm Wet wt	0.017 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC

ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION

Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Rabbit

Tissue	Cases Exposure Route	Range	Mean	General Information
8231 Muscle	a) 6 b) 4 c) 2 Ingestion	a) Not given b) Not given c) Not given	a) 470 ppb b) 105 ppb c) 100 ppb	a) Day 7 b) Day 15 c) Day 30 Not detected in 7 on day 0. Data from 1984 MVM-dissertation, (Sokoine Univ Agric, Tanzania) by R.D. Mosha. Tanzania GC-EC
DELIBERATE EXPOSURE; TERRESTRIAL; GOATS; LINDANE; BLOOD; MILK; LIVER; MUSCLES; ADIPOSE TISSUE; RABBITS; TANZANIA; FOOD CONTAMINATION; PESTICIDES; PESTICIDE RESIDUES; INGESTION Mosha, R.D.; Gyrd-Hansen, N.; Kraul, I. 1986 Bulletin of Environmental Contamination and Toxicology 35:518-522				

Rat, brown
RATTUS NORVERGICUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8232 Liver	5	Not detected-0.01 ppm Wet wt	0.007 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
8233 Muscle	5	Not detected-0.02 ppm Wet wt	0.008 ppm Geometric Wet wt	Collected 6/82-6/83 in stabilized sands of Donana National Park. Detection limit 0.05 ppm. Part of study of organochlorine and heavy metal levels in 10 mammalian species. Throughout study, levels in general were low enough not to affect survival/reproduction with exceptions, in some samples, of DDE, DDT, PCB, Hg. Spain GC-EC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; LIVER; MUSCLES; RABBITS; DEER; BOARS; HEDGEHOGS; RATS; MICE; OTTERS; LYNX; PESTICIDES; METALS; DDE; DDT; POLYCHLORINATED BIPHENYLS; HEXACHLOROCYCLOHEXANE; MERCURY; CADMIUM; LEAD; COPPER; ZINC; SPAIN; BIOACCUMULATION; MAMMALS; ANIMAL POPULATIONS; BIOMAGNIFICATION Hernandez, L.M.; Gonzalez, M.J.; Rico, M.C.; Fernandez, M.A.; Baluja, G. 1985 Journal of Environmental Science and Health B20(6):633-650				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Razorbill
ALCA TORDA

Tissue	Cases Exposure Route	Range	Mean	General Information
8234 Eggs	9	Not given	6+/-3 ug/g Wet wt	Collected in West Finnmark, 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 Environmental Pollution (Series A) 39:79-93				

Reindeer
RANGIFER sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8235 Body	2 Ingestion	3.16-4.2 ug	3.68 ug	Total burden in 3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 1380 ug. Means calculated by extractor. Sweden, Lake Rogen district
8236 Liver	2 Ingestion	0.134-0.18 ng/g	0.16 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 1380 ug. Means calculated by extractor. Sweden, Lake Rogen district
8237 Muscle	2 Ingestion	0.124-0.163 ng/g	0.14 ng/g	3 and 4-yr old female reindeer slaughtered 11/81 and 11/79, respectively. Estimated annual uptake from lichens was 1380 ug. Means calculated by extractor. Sweden, Lake Rogen district
ENVIRONMENTAL EXPOSURE; DEER; BODY; MUSCLES; LIVER; SWEDEN; TERRESTRIAL; FOOD CONTAMINATION; ANIMAL FEEDS; POLYCHLORINATED BIPHENYLS; DDD; DDE; LINDANE; HEXACHLOROBENZENE; PESTICIDES Villeneuve, J.P.; Holm, E.; Cattini, C. 1985 Chemosphere 14(11/12):1651-1658				

Roach
RUTILUS RUTILUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8238 Body	223	0.0-0.002 mg/kg	0.001 mg/kg	Collected in fall of 1980 and spring of 1981. In 31% of total. Maximum permissible level=0.200 mg/kg. Germany (West), Lahn River GC/MS
BODY; ROACH; PERCH; AQUATIC; GERMANY; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; DDT; DDE; INDUSTRIAL POLLUTION; AGRICULTURE; PESTICIDE RESIDUES; FISHES; BIOLOGICAL MONITORING; WATER POLLUTION Schuler, W.; Brunn, H.; Manz, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:608-616				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Salmon, Baltic
SALMO SALAR

Tissue	Cases Exposure Route	Range	Mean	General Information
8239 Liver	a) 15 b) 3 c) 10	a) 0-48 ppb b) 0-8 ppb c) 0-7 ppb Wet wt	a) 8.80+/-14.7 ppb b) 4.67+/-4.16 ppb c) 2.30+/-2.71 ppb Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacraficed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg liver fat 2.06-2.37%. Detection limit 0.5 ppb. Finland, Baltic Sea GC-EC
8240 Muscle	a) 14 b) 3 c) 10	a) 0-20 ng/g b) 3-7 ng/g c) 0-4 ng/g Wet wt	a) 5.00+/-5.75 ng/g b) 5.67+/-2.31 ng/g c) 2.10+/-1.66 ng/g Wet wt	a) Kemi River population, collected 6/82 during spawning migration, Baltic Sea near river mouth b) Kymi River population, collected 6/82 during spawning migration, Gulf of Finland near river mouth c) Hatchery grown, northern Finland Eggs stripped and fish sacrificed 10/82. Avg wt 3.22-5.00 kg, avg length 65.1-82.0 cm, avg muscle fat 4.02-5.43%. Detection limit 0.5 ng/g. Finland, Baltic Sea GC-EC

FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES

Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740

Scorpion, sea
MYOXOCEPHALUS SCORPIUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8241 Liver	6	Not detected-5 ug/kg Wet wt	2+/-2 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION

Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Shad, gizzard
DOROSOMA CEPEDIANUM

Tissue	Cases Exposure Route	Range	Mean	General Information
8242 Body, whole		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.01 ug/g b) 0.01 ug/g c) 0.01 ug/g d) 0.01 ug/g e) 0.01 ug/g f) 0.01 ug/g g) 0.07 ug/g h) 0.06 ug/g Wet wt Geometric	a) 3 composite samples from Lake Verret b) 3 from Lake Fausse Point c) 1 from Little Pigeon Bayou d) 3 from Grand Lake e) 3 from Henderson Lake f) 3 from Bayou Petite Prairie g) 3 from Spring Bayou h) 3 from Raccouri Old River Collected 6/81, 1.4-5.0% lipids, wt 60-227 g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Shag
PHALACROCORAX ARISTOTELIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8243 Eggs	a) 10 b) 10	a) Not given b) Not given	a) 1+/-1 ug/g b) 5+/-0 ug/g Wet wt	a) East Finnmark b) Lofoten Collected 1983. Levels were well below those at which breeding could be expected to be affected. Norway GC
CHLORINE ORGANIC COMPOUNDS; NORWAY; ENVIRONMENTAL EXPOSURE; MERCURY; BIRDS; HEXACHLOROBENZENE; POLYCHLORINATED BIPHENYLS; AQUATIC; EGGS; BIOLOGICAL MONITORING Barrett, R.T.; Skaare, J.U.; Norheim, G.; Vader, W.; Froslie, A. 1985 *Environmental Pollution (Series A)* 39:79-93				

Sheep
OVIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8244 Adipose		0.004-1.611 ppm Fat basis	0.225 ppm Fat basis	Samples purchased from Baghdad meat markets in 1983. Iraq GC
ADIPOSE TISSUE; CATTLE; SHEEP; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; IRAQ; HEPTACHLOR; DIELDRIN; DDT; LINDANE; BIOACCUMULATION Al-Omar, M.; Al-Bassomy, M.; Al-Ogaily, N.; Al-Din Shebl, D. 1985 Bulletin of Environmental Contamination and Toxicology 34:509-512				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Sole, lemon
MICROSTOMAS KITT

Tissue	Cases Exposure Route	Range	Mean	General Information
8245 Liver	10	1-3 ug/kg Wet wt	1+/-1 ug/kg Wet wt	Collected in Sogndalsfjord in 1982. Western Norway GC-EC
LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41				

Starling
STURNUS VULGARIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8246 Adipose	a) 49 b) 49 c) 23 d) 21 e) 24	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 362+/-658 ppb b) 231+/-265 ppb c) 242+/-253 ppb d) 123+/-189 ppb e) 334+/-780 ppb Fat basis	a) 1978 b) 1979 c) 1981 d) 1982 e) 1983 Years collected from nests, immediately prior to flight. Detection limit 0.5 ng/g (ppb). Finland GC-EC
8247 Muscle	a) 49 b) 49 c) 23 d) 21 e) 24	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 8.84+/-17.29 ppb b) 9.18+/-10.38 ppb c) 7.52+/-6.41 ppb d) 2.90+/-5.80 ppb e) 8.00+/-17.84 ppb Wet wt	a) 1978 b) 1979 c) 1981 d) 1982 e) 1983 Years collected from nests, immediately prior to flight. Detection limit 0.5 ng/g (ppb). Finland GC-EC
MUSCLES; ADIPOSE TISSUE; BIRDS; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; FINLAND; JUVENILES; CHLORINATED HYDROCARBONS; DDD; DDE; DDT; HEXACHLOROBENZENE; MERCURY; LINDANE; OXYCHLORDANE; BIOACCUMULATION; PESTICIDES; PESTICIDE RESIDUES Paasivirta, J.; Paukku, R.; Surma-Aho, K.; Welling, L. 1985 Chemosphere 14(5):457-468				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Sucker, redhorse
MOXOSTOMA sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8248 Body		Not applicable	<0.002 mg/ml	Milwaukee River, WI, 7/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Sucker, white
CATOSTOMUS COMMERSONI

Tissue	Cases Exposure Route	Range	Mean	General Information
8249 Body		Not applicable	<0.002 mg/kg	Chequamegon Bay, Lake Superior, WI, 8/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Sunfish
LEPOMIS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8250 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) Not detected b) Not detected c) 0.04 ug/g d) 0.05 ug/g Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Grand Lake c) 1 from Bayou Petite Prairie d) 2 from Spring Bayou Collected 6/81, 0.8-3.2% lipids, wt 55-139 g. Detection limits <0.01 ug/g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS
Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Swine
SUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8251 Adipose	a) 3 b) 3 c) 3 d) 3 Dermal	a) 2.8-7.7 mg/kg b) 1.8-3.8 mg/kg c) 0.73-1.4 mg/kg d) 1.7-1.9 mg/kg	a) 4.7+/-2.6 mg/kg b) 2.6+/-1.1 mg/kg c) 1.0+/-0.3 mg/kg d) 1.8+/-0.1 mg/kg	a) 50% wettable powder in water b) 11% emulsifiable concentrate in water base c) 11% emulsifiable concentrate with mineral oil base d) 0.86% emulsifiable concentrate ready-to-use Formulations used in spray dose of 1.29 g AI/animal. Barrows weighed 43-50 kg (45.6+/-2.0 kg). Measured 24 hr after application. Canada, Ontario, Guelph
8252 Brain	a) 3 b) 3 c) 3 d) 3 Dermal	a) 0.12-0.22 mg/kg b) 0.12-0.23 mg/kg c) 0.051-0.075 mg/kg d) 0.16-0.17 mg/kg	a) 0.16+/-0.06 mg/kg b) 0.17+/-0.06 mg/kg c) 0.065+/-0.012 mg/kg d) 0.17+/-0.007 mg/kg	a) 50% wettable powder in water b) 11% emulsifiable concentrate in water base c) 11% emulsifiable concentrate with mineral oil base d) 0.86% emulsifiable concentrate ready-to-use Formulations used in spray dose of 1.29 g AI/animal. Barrows weighed 43-50 kg (45.6+/-2.0 kg). Measured 24 hr after application. Canada, Ontario, Guelph
8253 Kidney	a) 3 b) 3 c) 3 d) 3 Dermal	a) 0.12-0.17 mg/kg b) 0.16-0.20 mg/kg c) 0.028-0.14 mg/kg d) 0.074-0.13 mg/kg	a) 0.15+/-0.029 mg/kg b) 0.18+/-0.02 mg/kg c) 0.073+/-0.059 mg/kg d) 0.095+/-0.030 mg/kg	a) 50% wettable powder in water b) 11% emulsifiable concentrate in water base c) 11% emulsifiable concentrate with mineral oil base d) 0.86% emulsifiable concentrate ready-to-use Formulations used in spray dose of 1.29 g AI/animal. Barrows weighed 43-50 kg (45.6+/-2.0 kg). Measured 24 hr after application. Canada, Ontario, Guelph
8254 Liver	a) 3 b) 3 c) 3 d) 3 Dermal	a) 0.087-0.38 mg/kg b) 0.16-0.70 mg/kg c) 0.010-0.021 mg/kg d) 0.008-0.057 mg/kg	a) 0.47+/-0.036 mg/kg b) 0.25+/-0.39 mg/kg c) 0.015+/-0.006 mg/kg d) 0.033+/-0.025 mg/kg	a) 50% wettable powder in water b) 11% emulsifiable concentrate in water base c) 11% emulsifiable concentrate with mineral oil base d) 0.86% emulsifiable concentrate ready-to-use Formulations used in spray dose of 1.29 g AI/animal. Barrows weighed 43-50 kg (45.6+/-2.0 kg). Measured 24 hr after application. Canada, Ontario, Guelph
8255 Muscle	a) 3 b) 3 c) 3 d) 3 Dermal	a) 0.16-2.7 mg/kg b) 0.20-0.38 mg/kg c) 0.10-0.61 mg/kg d) 0.33-0.42 mg/kg	a) 1.04+/-1.44 mg/kg b) 0.29+/-0.09 mg/kg c) 0.29+/-0.28 mg/kg d) 0.36+/-0.05 mg/kg	a) 50% wettable powder in water b) 11% emulsifiable concentrate in water base c) 11% emulsifiable concentrate with mineral oil base d) 0.86% emulsifiable concentrate ready-to-use Formulations used in spray dose of 1.29 g AI/animal. Barrows weighed 43-50 kg (45.6+/-2.0 kg). Measured 24 hr after application. Canada, Ontario, Guelph

(next page)

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Swine
SUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8256 Skin	a) 3 b) 3 c) 3 d) 3 Dermal	a) 58-330 mg/kg b) 21-250 mg/kg c) 0.3-12 mg/kg d) 28-33 mg/kg	a) 157+/-150 mg/kg b) 102+/-128 mg/kg c) 5.3+/-6.0 mg/kg d) 30+/-3 mg/kg	a) 50% wettable powder in water b) 11% emulsifiable concentrate in water base c) 11% emulsifiable concentrate with mineral oil base d) 0.86% emulsifiable concentrate ready-to-use Formulations used in spray dose of 1.29 g AI/animal. Barrows weighed 43-50 kg (45.6+/-2.0 kg). Measured 24 hr after application. Canada, Ontario, Guelph
SWINE; DELIBERATE EXPOSURE; LINDANE; MUSCLES; ADIPOSE TISSUE; SKIN; KIDNEYS; BRAIN; LIVER; TERRESTRIAL; PESTICIDES Surgeoner, G.A.; Flannigan, G. 1986 Canadian Veterinary Journal 27:2-5				

Trout, Bothnian Bay
SALMO TRUTTA

Tissue	Cases Exposure Route	Range	Mean	General Information
8257 Eggs	11	0-12 ppb Wet wt	3.18+/-3.40 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg egg fat 2.72%. Finland, Baltic Sea GC-EC
8258 Liver	11	0-3 ppb Wet wt	1.00-1.18 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg liver fat 2.72%. Finland, Baltic Sea GC-EC
8259 Muscle	11	0-3 ppb Wet wt	1.36+/-1.29 ppb Wet wt	Local Kemi River population, collected 6/82. Eggs stripped and fish sacrificed 10/82. Avg wt 3.15 kg, avg length 66.9 cm, avg muscle fat 3.15%. Finland GC-EC
FISHES; CHLORINE ORGANIC COMPOUNDS; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; EGGS; PESTICIDE RESIDUES; FINLAND; BALTIC SEA; CHLORINATED HYDROCARBONS; WATER POLLUTION; PESTICIDES Vuorinen, P.J.; Paasivirta, J.; Piilola, T.; Surma-Aho, K.; Tarhanen, J. 1985 Chemosphere 14(11/12):1729-1740				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
8260 Body	10	Not given	0.3+/-0.1 ng/g	Comparison of laboratory- and field-derived bioconcentration factors (BCFs) for 34 chemicals showed predictions based on lab BCFs useful for chemicals with short half-lives but too low for long half-life chemicals where contaminated food is major source. Lake Ontario, Ganaraska River CC; EC
FISHES; ENVIRONMENTAL EXPOSURE; BIOCONCENTRATION; CHLORINE ORGANIC COMPOUNDS; PESTICIDE RESIDUES; WATER POLLUTION; POLYCHLORINATED BIPHENYLS Oliver, B.G.; Niimi, A.J. 1985 Environmental Science and Technology 19:842-849				

Vulture, Bengal
GYPS BENGALENSIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8261 Adipose	3	4.951-18.964 ppm Wet wt	10.400 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8262 Blood, plasma	3	0.044-0.080 ppm Wet wt	0.066 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8263 Brain	3	0.142-0.683 ppm Wet wt	0.26 ppm Geometric Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8264 Heart	3	Not given	0.261 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8265 Kidney	3	Not given	0.302 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8266 Liver	3	Not given	0.196 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC

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Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)
58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Vulture, Bengal
GYPS BENGALENSIS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8267 Lung	3	Not given	0.067 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8268 Muscle	3	Not given	0.420 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
8269 Spleen	3	Not given	0.535 ppm Wet wt	Part of monitoring study of wild birds, and farm-bred chickens. Wild birds trapped 2-3/80. Values, for whole tissue, not corrected for recovery. India, Lucknow GLC
ENVIRONMENTAL EXPOSURE; BIRDS; TERRESTRIAL; PESTICIDES; PESTICIDE RESIDUES; HEXACHLOROBENZENE; LINDANE; DDE; TDE; DDT; HEXACHLOROCYCLOHEXANE; BLOOD PLASMA; BRAIN; ADIPOSE TISSUE; MUSCLES; LIVER; HEART; LUNGS; KIDNEYS; SPLEEN; INDIA Kaphalia, B.S.; Husain, M.M.; Seth, T.D.; Kumar, A.; Murti, C.R.K. 1981 Pesticides Monitoring Journal 15(1):9-13				

Walleye
STIZOSTEDION VITREUM VITREUM

Tissue	Cases Exposure Route	Range	Mean	General Information
8270 Body		a) Not applicable b) Not applicable c) Not applicable	a) <0.002 mg/kg b) <0.002 mg/kg c) 0.002 mg/kg	a) Wolf River, WI, 9/15/80 b) Fox River, WI, below DePere, 10/15/80 c) Chequamegon Bay, Lake Superior, WI, 8/15/80 Composite samples. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Cyclohexane, 1,2,3,4,5,6-hexachloro-, gamma- (8 CI); Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- (9 CI)

58-89-9
C6-H6-Cl6
MW 290.85, MP gamma-isomer crystals 112.5 C, BP 323.4 C, 176.2 C at 10 mm Hg, VP 0.14 mm Hg at 40 C

Woodcock
SCOLOPAX RUSTICOLA

Tissue	Cases Exposure Route	Range	Mean	General Information
8271 Adipose	8	Not given	0.032 mg/kg	Detectable levels in 7 of 8. Application permitted with few restrictions. Germany, West GC

ADIPOSE TISSUE; MUSCLES; BIRDS; TERRESTRIAL; RABBITS; ENVIRONMENTAL EXPOSURE; GERMANY; CHLORINATED HYDROCARBONS; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; PESTICIDES; PESTICIDE RESIDUES; LINDANE; HEPTACHLOR EPOXIDE; METABOLITES; DDT; AGRICULTURE; ANIMAL POPULATIONS; BIOLOGICAL MONITORING; LAND POLLUTION; WATER POLLUTION

Brunn, H.; Berlich, H.D.; Muller, F.J. 1985 Bulletin of Environmental Contamination and Toxicology 34:527-532

Wrasse, ballan
LABRUS BERGGYLTA

Tissue	Cases Exposure Route	Range	Mean	General Information
8272 Liver	a) 10 b) 10	Not detected-4 ug/kg Wet wt	1+/-1 ug/kg Wet wt	a) 1977 b) 1982 Year of collection in Sogndalsfjord. Limit of detection 1 ug/kg wet wt. Western Norway GC-EC

LIVER; ENVIRONMENTAL EXPOSURE; FISHES; AQUATIC; NORWAY; DDT; DDD; DDE; OXYCHLORDANE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; PESTICIDES; BIOACCUMULATION; PESTICIDE RESIDUES; WATER POLLUTION

Skare, J.U.; Stenersen, J.; Kveseth, N.; Polder, A. 1985 Archives of Environmental Contamination and Toxicology 14:33-41

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-9a-hydroxy-4-methoxy-

6885-57-0
C17-H14-O7
MP 293 C (decomp)

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8273 Blood, clot	16 Ingestion	0.01-0.01 ug/kg	0.01 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

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Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-9a-hydroxy-4-methoxy-
6885-57-0
C17-H14-O7
MP 293 C (decomp)

Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8274 Blood, serum	16 Ingestion	Trace	Trace	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Trace assumed to be *0.0058 ug/kg, largest amount not measureable.* Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41				

Tissue	Cases Exposure Route	Range	Mean	General Information
8275 Eggs	*6-9* Ingestion	*0-0.04 ug/kg*	*Not given*	Days 1 and 25 during 28-day feeding. Levels to 0 4 days after withdrawal. Range of means from 3 composite samples/day. Rapid transfer to eggs. Mean for combined residue levels <0.5 ug/kg. Data also separated for albumin and yolk. Decreased egg production, egg wt TLC
DELIBERATE EXPOSURE; FOOD CONTAMINATION; TERRESTRIAL; CHICKENS; AFLATOXINS; EGGS; BIRDS Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I. 1985 Food and Chemical Toxicology 23(12):1057-1061				

Tissue	Cases Exposure Route	Range	Mean	General Information
8276 Gizzard	8 Ingestion	0-0.02 ug/kg	0.01 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8277 Heart	7 Ingestion	0-0.2 ug/kg	0.01 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8278 Kidney	15 Ingestion	0.03-0.08 ug/kg	0.07 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Four composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

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Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-9a-hydroxy-4-methoxy-
6885-57-0
C17-H14-O7
MP 293 C (decomp)

Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8279 Liver	8 Ingestion	Trace-0.05 ug/kg	0.03 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Trace assumed to be 0.0058 ug/kg, the largest amount that was unmeasureable. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8280 Muscle	8 Ingestion	a) 0-0.02 ug/kg b) Trace-0.02 ug/kg	a) 0.01 ug/kg b) 0.01 ug/kg	a) Breast b) Leg White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Trace assumed to be 0.0058 ug/kg, the largest amount that was unmeasurable.1 Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8281 Ovary	7 Ingestion	Trace-0.02	0.01 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Trace assumed to be 0.0058 ug/kg, the largest amount that was unmeasurable. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8282 Spleen	16 Ingestion	Not applicable	0.01 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Combined spleens from all hens. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES

Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-
6795-23-9
C17-H12-O7
MW 328.3, MP 299 C (decomp)

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8283 Liver	5	Not applicable	3 ng/g	Highest level found. At necropsy following death from eating feed contaminated with aflatoxin B1. *Major clinical symptoms:* Lethargy, depression, weakness, ataxia, staggering. Wt gain, feed consumption below normal. Some respiratory disease. Half of the poisoned animals died. Necropsy findings: Swollen, firm, gray liver. Edema of gallbladder, bile, ducts, abomasal wall, colonic mesentary. Rectal prolapse, dark urine, fluid in thoracic and abdominal cavities. Fluorimetry
CATTLE; LIVER; URINE; ENVIRONMENTAL EXPOSURE; AFLATOXINS; ANIMAL FEEDS; FOOD CONTAMINATION; ACCIDENTAL POISONING; TERRESTRIAL				
Osweiler, G.D.; Trampel, D.W. 1985 Journal of the American Veterinary Medical Association 187(6):636-637				

Tissue	Cases Exposure Route	Range	Mean	General Information
8284 Liver	a) 3 b) 3 c) 2 d) 3 e) 3 f) 2 g) 3 h) 3 i) 2 Ingestion	a) Not detected b) Not detected-0.62 ppb c) Not detected d) 0.54-0.67 ppb e) 0.68-1.58 ppb f) Not detected-1.56 ppb g) 0.29-0.87 ppb h) 1.19-2.76 ppb i) 1.22-1.54 ppb Wet wt	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 60 ppb in diet, day 64 b) Day 106 c) Day 151 d) 300 pb in diet, day 64 e) Day 106 f) Day 151 g) 600 ppb, day 64 h) Day 106 i) Day 151 Steers (wt 258-270 kg) fed contaminated ration 155 d. Not detected in 10 controls or in 6 cases (2 at each level) on d 163 after starting control ration d 156. Detection limit 0.25 ppb. Proliferation of endothelial cells, fibrosis and disruption of liver structure in 9/10 cases fed 600-ppb ration TLC
CATTLE; DELIBERATE EXPOSURE; TERRESTRIAL; COMPARATIVE EVALUATIONS; AFLATOXINS; LIVER				
Helferich, W.G.; Garrett, W.N.; Hsich, D.P.H.; Baldwin, R.L. 1986 Journal of Animal Science 62:691-696				

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-
6795-23-9
C17-H12-O7
MW 328.3, MP 299 C (decomp)

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8285 Urine	5	5-100 ng	40 ng/ml	At necropsy following death from eating feed contaminated with aflatoxin B1. Major clinical symptoms: Lethargy, depression, weakness, ataxia, staggering. Wt gain, feed consumption below normal. Some respiratory disease. Half of the poisoned animals died. Necropsy findings: Swollen, firm, gray liver. Edema of gallbladder, bile, ducts, abomasal wall, colonic mesentary. Rectal prolapse, dark urine, fluid in thoracic and abdominal cavities. Fluorimetry
CATTLE; LIVER; URINE; ENVIRONMENTAL EXPOSURE; AFLATOXINS; ANIMAL FEEDS; FOOD CONTAMINATION; ACCIDENTAL POISONING; TERRESTRIAL Osweiler, G.D.; Trampel, D.W. 1985 Journal of the American Veterinary Medical Association 187(6):636-637				

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8286 Blood, clot	16 Ingestion	Trace	Trace	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Trace assumed to be 0.0058 ug/kg, largest amount not measureable. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8287 Blood, serum	16 Ingestion	0 ug/kg	0 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41				

Tissue	Cases Exposure Route	Range	Mean	General Information
8288 Eggs	6-9 Ingestion	0-0.02 ug/kg	Not given	Days 1 and 25 during 28-day feeding. Levels to 0 4 days after withdrawal. Range of means from 3 composite samples/day. Rapid transfer to eggs. Mean for combined residue levels <0.5 ug/kg. Data also separated for albumin and yolk. Decreased egg production, egg wt TLC
DELIBERATE EXPOSURE; FOOD CONTAMINATION; TERRESTRIAL; CHICKENS; AFLATOXINS; EGGS; BIRDS Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I. 1985 Food and Chemical Toxicology 23(12):1057-1061				

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-
6795-23-9
C17-H12-O7
MW 328.3, MP 299 C (decomp)

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8289 Gizzard	8 Ingestion	0-0.01 ug/kg	0 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8290 Heart	7 Ingestion	0-Trace (ug/kg)	0 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8291 Kidney	15 Ingestion	0.07-0.11 ug/kg	0.10 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Four composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8292 Liver	8 Ingestion	0-0.05 ug/kg	0.02 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8293 Muscle	8 Ingestion	a) 0-Trace (ug/kg) b) 0-0.01 ug/kg	a) 0 ug/kg b) 0 ug/kg	a) Breast b) Leg White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Trace assumed to be 0.0058 ug/kg, the largest amount that was unmeasurable.1 Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8294 Ovary	7 Ingestion	0-0.02 ug/kg	0.01 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8295 Spleen	16 Ingestion	Not applicable	Trace	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Combined spleens from all hens. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES

Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-9a-hydroxy-4-methoxy-, (6aR-cis)-
6795-23-9
C17-H12-O7
MW 328.3, MP 299 C (decomp)

Swine
SUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8296 Kidney	a) 2 b) 2 c) 2 d) 2 Ingestion	a) Not detectable-Trace b) 0.18-0.34 ng/g c) 0.67-1.02 ng/g d) 0.093-1.30 ng/g	a) Not given b) Not given c) Not given d) Not given	a) Day of withdrawal (d 0) from 21 d on diet with 41 ng aflatoxin B/g food. Not detected on d 1 and 2 b) Day 0 after 341 ng/g food. None detected d 1 and 2: c) Day 0 after 866 ng/g food. Traces on d 1, none detected d 2 d) Day 0 after 1253 ng/g food. 0.10 and 0.24 on d 1, none detected in 1 and 0.17 ng/g in other on d 2. Detection limit was 0.10 ng/g. At highest 2 levels, transient increase in prothrombin time TLC
8297 Liver	a) 2 b) 2 c) 2 d) 2 Ingestion	a) Not detected b) 0.32-0.39 ng/g b) 0.28-0.30 ng/g c) 0.59-0.77 ng/g d) 0.59-0.77 ng/g	a) Not given b) Not given c) Not given d) Not given	a) Day of withdrawal (d 0) from 21 d on diet with 41 ng aflatoxin B/g food. Not detected on d 1 and 2 b) Day 0 after 341 ng/g food. None detected d 1 and 2: c) Day 0 after 866 ng/g food. 0.15 ng/g in 1, none detected in other on d 1 and none detected on d 2 d) day 0 after 1253 ng/g food. 0.10 in both on d 1, none detected on d 2. Detection limit was 0.10 ng/g. At highest 2 levels, transient increase in prothrombin time TLC
DELIBERATE EXPOSURE; SWINE; KIDNEYS; LIVER; AFLATOXINS; ANIMAL FEEDS; FOOD CONTAMINATION; BIOACCUMULATION				
Neff, G.L.; Edds, G.T. 1981 Food and Cosmetics Toxicology 19:739-42				

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,8,9,9aalpha-hexahydro-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-4-methoxy-, (6aR-cis)- (9 CI)
7220-81-7
C17-H14-O6
MW 314.08, MP 286-289 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8298 Blood, clot	16 Ingestion	0.07-0.10 ug/kg	0.08 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

(next page)

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,8,9,9aalpha-hexahydro-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-4-methoxy-, (6aR-cis)- (9 CI)

7220-81-7
C17-H14-O6
MW 314.08, MP 286-289 C

Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8299 Blood, serum	16 Ingestion	0.04-0.05 ug/kg	0.04 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41				

Tissue	Cases Exposure Route	Range	Mean	General Information
8300 Eggs	6-9 Ingestion	Trace-0.05 ug/kg	Not given	Days 1 and 25 during 28-day feeding. Levels to 0 4 days after withdrawal. Range of means from 3 composite samples/day. Rapid transfer to eggs. Mean for combined residue levels <0.5 ug/kg. Data also separated for albumin and yolk. Decreased egg production, egg wt TLC
DELIBERATE EXPOSURE; FOOD CONTAMINATION; TERRESTRIAL; CHICKENS; AFLATOXINS; EGGS; BIRDS Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I. 1985 Food and Chemical Toxicology 23(12):1057-1061				

Tissue	Cases Exposure Route	Range	Mean	General Information
8301 Gizzard	8 Ingestion	0.16-0.73 ug/g	0.38 ug/g	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8302 Heart	7 Ingestion	0.05-0.05 ug/kg	0.05 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

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Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,8,9,9aalpha-hexahydro-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-4-methoxy-, (6aR-cis)- (9 CI)

7220-81-7
C17-H14-O6
MW 314.08, MP 286-289 C

Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8303 Kidney	15 Ingestion	0.12-0.30 ug/kg	0.20 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Four composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8304 Liver	8 Ingestion	0.03-0.26 ug/kg	0.13 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8305 Muscle	8 Ingestion	a) 0-0.05 ug/kg b) 0.02-0.22 ug/kg	a) 0.01 ug/kg b) 0.06 ug/kg	a) Breast b) Leg White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8306 Ovary	7 Ingestion	0.02-0.04 ug/kg	0.03 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8307 Spleen	16 Ingestion	Not applicable	0.10 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Combined spleens from all hens. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES

Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,8,9,9aalpha-hexahydro-8-hydroxy-4-methoxy- (8 CI);
Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-8-hydroxy-4-methoxy-, (6aS-(6aalpha,8beta,9aalpha))- (9 CI)

17878-54-5
C17-H14-O7
Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8308 Blood, clot	16 Ingestion	0.02-0.04 ug/g	0.03 ug/g	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8309 Blood, serum	16 Ingestion	0.01-0.02 ug/kg	0.01 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Trace assumed to be 0.0058 ug/kg, largest amount not measureable. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41				

Tissue	Cases Exposure Route	Range	Mean	General Information
8310 Eggs	6-9 Ingestion	0.02-0.09 ug/kg	Not given	Days 1 and 10 during 28-day feeding. Levels to 0 4 days after withdrawal. Range of means from 3 composite samples/day. Rapid transfer to eggs. Mean for combined residue levels <0.5 ug/kg. Data also separated for albumin and yolk. *Decreased egg production, egg wt* TLC
DELIBERATE EXPOSURE; FOOD CONTAMINATION; TERRESTRIAL; CHICKENS; AFLATOXINS; EGGS; BIRDS Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I. 1985 Food and Chemical Toxicology 23(12):1057-1061				

Tissue	Cases Exposure Route	Range	Mean	General Information
8311 Gizzard	8 Ingestion	0-0.10 ug/g	0.05 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8312 Heart	7 Ingestion	0.05-0.06 ug/kg	0.05 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

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Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,8,9,9aalpha-hexahydro-8-hydroxy-4-methoxy- (8 CI); Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,8,9,9a-hexahydro-8-hydroxy-4-methoxy-, (6aS-(6aalpha,8beta,9aalpha))- (9 CI)
17878-54-5
C17-H14-O7
Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8313 Kidney	15 Ingestion	1.93-2.30 ug/kg	2.12 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Four composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8314 Liver	8 Ingestion	0.35-2.32 ug/g	1.52 ug/g	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8315 Muscle	8 Ingestion	a) 0-0.03 ug/kg b) 0.02-0.04 ug/kg	a) 0.02 ug/kg b) 0.03 ug/kg	a) Breast b) Leg White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8316 Ovary	7 Ingestion	0.02-0.04 ug/kg	0.03 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8317 Spleen	16 Ingestion	Not applicable	0.10 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Combined spleens from all hens. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41				

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI) Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI)

1162-65-8
C17-H12-O6
MW 312.3, MP 268-269 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8318 Liver	a) 3 b) 3 c) 2 d) 3 e) 3 f) 2 g) 3 h) 3 i) 2 Ingestion	a) Not detected-0.29 ppb b) Not detected c) Not detected d) Not detected-0.50 ppb e) Not detected-0.65 ppb f) Not detected g) Not detected-1.14 ppb h) 0.36-0.92 ppb i) 0.33-0.59 ppb Wet wt	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 60 ppb in diet, day 64 b) Day 106 c) Day 151 d) 300 pb in diet, day 64 e) Day 106 f) Day 151 g) 600 ppb, day 64 h) Day 106 i) Day 151 Steers (wt 258-270 kg) fed contaminated ration 155 d. Not detected in 10 controls or in 6 cases (2 at each level) on d 163 after starting control ration d 156. Detection limit 0.25 ppb. Proliferation of endothelial cells, fibrosis and disruption of liver structure in 9/10 cases fed 600-ppb ration TLC
CATTLE; DELIBERATE EXPOSURE; TERRESTRIAL; COMPARATIVE EVALUATIONS; AFLATOXINS; LIVER Helferich, W.G.; Garrett, W.N.; Hsich, D.P.H.; Baldwin, R.L. 1986 Journal of Animal Science 62:691-696				

Tissue	Cases Exposure Route	Range	Mean	General Information
8319 Urine	5	Not applicable	10 ng/ml	At necropsy following death from eating feed contaminated with aflatoxin B1. Range was undetected-20 ng/ml, detection limits not stated. Major clinical symptoms: Lethargy, depression, weakness, ataxia, staggering. Wt gain, feed consumption below normal. Some respiratory disease. Half of the poisoned animals died. Necropsy findings: Swollen, firm, gray liver. Edema of gallbladder, bile, ducts, abomasal wall, colonic mesentary. Rectal prolapse, dark urine, fluid in thoracic and abdominal cavities. Fluorimetry
CATTLE; LIVER; URINE; ENVIRONMENTAL EXPOSURE; AFLATOXINS; ANIMAL FEEDS; FOOD CONTAMINATION; ACCIDENTAL POISONING; TERRESTRIAL Osweiler, G.D.; Trampel, D.W. 1985 Journal of the American Veterinary Medical Association 187(6):636-637				

Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI) Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)benzopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI)

1162-65-8
C17-H12-O6
MW 312.3, MP 268-269 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8320 Blood, clot	16 Ingestion	0.06-0.12 ug/kg	0.09 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8321 Blood, serum	16 Ingestion	0.02-0.03 ug/kg	0.02 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two pools, 8 animals each. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41				

Tissue	Cases Exposure Route	Range	Mean	General Information
8322 Eggs	6-9 Ingestion	Trace-0.06 ug/kg	Not given	Days 1 and 10 during 28-day feeding. Levels to 0 4 days after withdrawal. Range of means from 3 composite samples/day. Rapid transfer to eggs. Mean for combined residue levels <0.5 ug/kg. Data also separated for albumin and yolk. Decreased egg production, egg wt TLC
DELIBERATE EXPOSURE; FOOD CONTAMINATION; TERRESTRIAL; CHICKENS; AFLATOXINS; EGGS; BIRDS Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I. 1985 Food and Chemical Toxicology 23(12):1057-1061				

Tissue	Cases Exposure Route	Range	Mean	General Information
8323 Gizzard	8 Ingestion	0.34-1.29 ug/kg	0.67 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8324 Heart	7 Ingestion	0.08-0.18 ug/kg	0.13 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Two composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

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Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)bensopyran-1,11-dione, 2,3,6aalpha,9aalpha-tetrahydro-4-methoxy- (8 CI) Cyclopenta(c)furo(3',2':4,5)furo(2,3-h)(1)bensopyran-1,11-dione, 2,3,6a,9a-tetrahydro-4-methoxy-, (6aR-cis)- (9 CI)

1162-65-8
C17-H12-O6
MW 312.3, MP 268-269 C

Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8325 Kidney	15 Ingestion	0.27-0.87 ug/kg	0-49 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Four composites. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8326 Liver	8 Ingestion	0.07-0.44 ug/g	0.20 ug/g	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8327 Muscle	8 Ingestion	a) 0-0.5 ug/kg b) Trace-0.11 ug/kg	a) 0.01 ug/kg b) 0.03 ug/kg	a) Breast b) Leg White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8328 Ovary	7 Ingestion	0.03-0.15 ug/kg	0.07 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged
8329 Spleen	16	Not applicable	0.25 ug/kg	White leghorn pullets, Shaver strain fed commercial layer mash spiked with 3310 and 1680 ug/kg of aflatoxins B1 and B2 respectively for 4 wk. Clearance after withdrawal also studied. Combined spleens from all hens. Livers pale, some hemorrhages. Ovaries, ova, hearts small. Livers, kidneys, spleens enlarged

DELIBERATE EXPOSURE; CHICKENS; TERRESTRIAL; FOOD CONTAMINATION; MUSCLES; LIVER; HEART; BLOOD; BLOOD SERUM; AFLATOXINS; GIZZARDS; KIDNEYS; SPLEEN; OVARIES

Wolzak, A.; Pearson, A.M.; Coleman, T.H.; Pestka, J.J.; Gray, J.I.; Chen, C. 1986 Food and Chemical Toxicology 24(1):37-41

Cyclopentane, ethyl-
1640-89-7
C7-H14
Clam
RANGIA CUNEATA

Tissue	Cases Exposure Route	Range	Mean	General Information
8330 Body		Not given	2.2 ppb Wet wt	Chef Menteur Pass, navigable channel into Lake Pontchartrain, specimens collected May-June, 1980. 5 samples. Louisiana GC/MS
BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255				

Oyster, American
CRASSOSTREA VIRGINICA

Tissue	Cases Exposure Route	Range	Mean	General Information
8331 Body		Not given	3.9 ppb Wet wt	Collected in May-June, 1980, from mouth of Inner Harbor Navigational Canal leading to Lake Pontchartrain. Expressed as equivalents of 2-bromo-1-chloropropane. Louisiana GC/MS
BODY; SHELLFISH; AQUATIC; ENVIRONMENTAL EXPOSURE; LOUISIANA; CHLORINATED HYDROCARBONS; HYDROCARBONS; BIOACCUMULATION; WATER POLLUTION Ferrario, J.B.; Lawler, G.C.; DeLeon, I.R.; Laseter, J.L. 1985 Bulletin of Environmental Contamination and Toxicology 34:246-255				

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3
Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8332 Adipose	18 Ingestion	0.08-0.05 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.11 ppm, d 5. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8333 Blood	18 Ingestion	3.07-0.03 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, on d 1, followed by sharp decrease. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC

(next page)

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3
Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8334 Brain	18 Ingestion	1.1-2.7 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 2.8 ppm, d 7. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8335 Eggs	30 Ingestion	a) 0.03-0.04 ppm b) 0.02-<0.01 ppm Ranges of means	a) Not given b) Not given	a) Egg yolk. Peak, 0.27 ppm, d 4 b) Egg white. Peak, 0.12 ppm, d 4 Day 1 and d 10 after single dose to hens of mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Eggs collected daily from white leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8336 Heart	18 Ingestion	0.30-0.15 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.75 ppm, d 3. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8337 Kidney	18 Ingestion	0.50-0.10 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.67 ppm, d 7. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8338 Liver	18 Ingestion	0.04-0.02 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.12 ppm, d 3. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8339 Ovary	18 Ingestion	0.045-0.010 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.045 ppm, d 1. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8340 Skin	18 Ingestion	0.03-0.04 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.12 ppm, d 5. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC

PESTICIDE RESIDUES; PESTICIDES; CHICKENS; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; AGRICULTURE; ADIPOSE TISSUE; BLOOD; BRAIN; KIDNEYS; LIVER; OVARIES; HEART; SKIN; EGGS; EGYPT

Saleh, M.A.; Ibrahim, N.A.; Soliman, N.Z.; El Sheimy, M.K. 1986 Journal of Agricultural and Food Chemistry 34:895-898

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3
Chicken, white leghorn
GALLUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8341 Adipose	a) 1 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.14-0.15 ug/g b) 0.12-0.66 ug/g c) 0.07-0.18 ug/g d) 0.04-0.19 ug/g e) <5 ppb-1.95 ug/g f) 0.09-0.31 ug/g g) 0.11-0.37 ug/g h) 0.11-0.13 ug/g	a) 0.14 ug/g b) 0.36 ug/g c) 0.13 ug/g d) 0.11 ug/g e) Not given f) 0.15 ug/g g) 0.21 ug/g h) 0.12 ug/g	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calculated from table. Excreted metabolites identified and metabolic pathway proposed. Includes subcutaneous and abdominal adipose. Canada Scintillation counting
8342 Blood	a) 2 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.07-0.11 ug/g b) 0.41-1.01 ug/g c) 0.13-0.15 ug/g d) 0.05-0.08 ug/g e) 0.04-0.12 ug/g f) 0.15-0.34 ug/g g) 0.06-0.14 ug/g h) 0.02-0.02 ug/g	a) 0.09 ug/g b) 0.80 ug/g c) 0.14 ug/g d) 0.07 ug/g e) 0.08 ug/g f) 0.26 ug/g g) 0.10 ug/g h) 0.02 ug/g	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calculated from table. Excreted metabolites identified and metabolic pathway proposed. Canada Scintillation counting
8343 Eggs		a) 0.052 ug/g-<5 ppb b) <5-<5 ppb c) 0.019-0.385 ug/g d) 0.003-0.201 ug/g	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Albumen, 1-7 d, peak (0.193 ug/g) 2 d after last dose of 7.5 mg gem-dimethyl-form for 3 d b) Albumen, 1-7 d, peak (0.10 ug/g) on d 2 after 7.5 mg benzyl-form for 3 d c) Yolk, 1-7 d, peak (0.577 ug/g) 2 d after last dose of 7.5 mg gem-dimethyl-form for 3 d d) Yolk, 1-7 d, peak (0.251 ug/g) 2 d after last dose of 7.5 mg benzyl-form for 3 d. Ranges of means of triplicate analyses or composite samples.

(next page)

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3
Chicken, white leghorn
GALLUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8344 Gizzard	a) 2 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.02-0.05 ug/g b) 0.27-0.61 ug/g c) 0.06-0.08 ug/g d) 0.01-0.04 ug/g e) 0.03-1.18 ug/g f) 0.03-0.24 ug/g g) 0.07-0.07 ug/g h) <5 ppb-0.04 ug/g	a) 0.03 ug/g b) 0.34 ug/g c) 0.07 ug/g d) 0.02 ug/g e) 0.60 ug/g f) 0.15 ug/g g) 0.7 ug/g h) Not given	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calculated from table. Excreted metabolites identified and metabolic pathway proposed. Canada Scintillation counting
8345 Heart	a) 2 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.02-0.02 ug/g b) 0.21-0.61 ug/g c) 0.05-0.07 ug/g d) 0.04-0.09 ug/g e) 0.02-0.09 ug/g f) 0.04-0.09 ug/g g) 0.03-0.04 ug/g h) <5-5 ppb	a) 0.02 ug/g b) 0.39 ug/g c) 0.06 ug/g d) 0.07 ug/g e) 0.05 ug/g f) 0.07 ug/g g) 0.03 ug/g h) <5 ppb	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calculated from table. Excreted metabolites identified and metabolic pathway proposed. Canada Scintillation counting
8346 Kidney	a) 2 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.43-0.79 ug/g b) 3.36-6.85 ug/g c) 0.86-1.05 ug/g d) 0.25-0.26 ug/g e) 0.27-0.72 ug/g f) 1.19-2.52 ug/g g) 0.25-0.52 ug/g h) <5 ppb-0.11 ug/g	a) 0.61 ug/g b) 4.64 ug/g c) 0.95 ug/g d) 0.25 ug/g e) 0.49 ug/g f) 1.78 ug/g g) 0.38 ug/g h) Not given	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calculated from table. Excreted metabolites identified and metabolic pathway proposed. Canada Scintillation counting

(next page)

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3
Chicken, white leghorn
GALLUS sp.

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8347 Liver	a) 2 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.27-0.49 ug/g b) 1.89-3.95 ug/g c) 0.44-0.52 ug/g d) 0.12-0.58 ug/g e) 0.19-0.35 ug/g f) 0.36-0.97 ug/g g) 0.19-0.23 ug/g h) 0.06-0.09 ug/g	a) 0.38 ug/g b) 2.54 ug/g c) 0.48 ug/g d) 0.35 ug/g e) 0.27 ug/g f) 0.71 ug/g g) 0.21 ug/g h) 0.075 ug/g	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calculated from table. Excreted metabolites identified and metabolic pathway proposed. Canada Scintillation counting
8348 Muscle	a) 2 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.02-0.03 ug/g b) 0.08-0.21 ug/g c) 0.03-0.18 ug/g d) 0.01-0.01 ug/g e) 0.02-0.12 ug/g f) <5 ppb-0.15 ug/g g) 0.03-0.03 ug/g h) <5-<5 ppb	a) 0.09 ug/g b) 0.12 ug/g c) 0.10 ug/g d) Not given e) 0.05 ug/g f) Not given g) 0.03 ug/g h) Not given	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calculated from table. Excreted metabolites identified and metabolic pathway proposed. Includes breast and leg muscle. Canada Scintillation counting
8349 Yolk, ovarian	a) 2 b) 4 c) 2 d) 2 e) 2 f) 4 g) 2 h) 2 Ingestion	a) 0.31-0.76 ug/g b) 1.21-3.31 ug/g c) 0.67-0.69 ug/g d) <5 ppb-0.06 ug/g e) 0.32-0.45 ug/g f) 0.53-0.79 ug/g g) 0.16-0.43 ug/g h) 0.02-0.08 ug/g	a) 0.53 ug/g b) 1.98 ug/g c) 0.68 ug/g d) Not given e) 0.39 ug/g f) 0.66 ug/g g) 0.30 ug/g h) 0.05 ug/g	a) Gem-dimethyl, 6 hr b) 18 hr c) 48 hr d) 120 hr e) Benzyl, 6 hr f) 18 hr g) 48 hr h) 120 hr Form of 7.5 mg daily dose and time of sacrifice after 3rd consecutive dose. Labeled with C-14. About 83% excreted in 24 hr. Means calcualted from table. Excreted metabolites identified and metabolic pathway proposed. Canada Scintillation counting

LIVER; KIDNEYS; HEART; ADIPOSE TISSUE; MUSCLES; YOLK; GIZZARDS; BLOOD; EGGS; CHICKENS; TERRESTRIAL; DELIBERATE EXPOSURE; ADULTS; CANADA; INSECTICIDES; BIOACCUMULATION; HEALTH HAZARDS

Akhtar, M.H.; Hamilton, R.M.G.; Trenholm, H.L. 1985 Journal of Agricultural and Food Chemistry 33:610-617

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3
Minnow, fathead
PIMEPHALES PROMELAS

Tissue	Cases Exposure Route	Range	Mean	General Information
8350 Body		a) 38.9-17.1 ng/g b) 31.9-12.6 ng/g Wet wt	a) Not applicable b) Not applicable	a) 2 hr-112 days, peak (100.2 ng/g) 4 days after artificial outdoor pond sprayed with 17.06 mg [C-14]-cyclopropyl alcohol form b) 2 hr-112 days, peak (42.0 ng/g) 8 hr after pond sprayed with 17.06 mg [C-14]-benzyl alcohol form Treatment rate of 10 g a.i./ha. 7/7/82. Also studied fate of label in pond sediment, suspended solids, plants, air, and water. Canada Scintillation counting
BODY; FISHES; AQUATIC; DELIBERATE EXPOSURE; CANADA; INSECTICIDES; BIOACCUMULATION; WATER POLLUTION Muir, D.C.G.; Rawn, G.P.; Grift, N.P. 1985 Journal of Agricultural and Food Chemistry 33:603-609				

Quail, Japanese
COTURNIX COTURNIX JAPONICA

Tissue	Cases Exposure Route	Range	Mean	General Information
8351 Adipose	Ingestion	a) Not given b) Not given	a) 1113+/-220 ppb b) 978+/-132 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8352 Bone	Ingestion	a) Not given b) Not given	a) 124+/-30 ppb b) 249+/-44 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8353 Brain	Ingestion	a) Not given b) Not given	a) 19+/-12 ppb b) 108+/-30 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8354 Digestive tract	Ingestion	a) Not given b) Not given	a) 1607+/-212 ppb b) 3723+/-485 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC

(next page)

Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3

Quail, Japanese
COTURNIX COTURNIX JAPONICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8355 Eggs	Ingestion	a) Not given b) Not given	a) 51+/-5 ppb b) 46+/-7 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8356 Feathers	Ingestion	a) Not given b) Not given	a) 1894+/-280 ppb b) 23,050+/-2300 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8357 Genital tract	Ingestion	a) Not given b) Not given	a) 7+/-2 ppb b) 8+/-2 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. Females. GC-EC
8358 Heart	Ingestion	a) Not given b) Not given	a) 174+/-24 ppb b) 511+/-80 ppb	a) After fed commericial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8359 Kidney	Ingestion	a) Not given b) Not given	a) 17+/-6 ppb b) 28+/-4 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8360 Liver	Ingestion	a) Not given b) Not given	a) 63+/-35 ppb b) 12+/-7 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8361 Lung	Ingestion	a) Not given b) Not given	a) 29+/-12 ppb b) 26+/-4 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC

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Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1alpha(S),3alpha))-
52918-63-5
C22-H19-Br2-N-O3

Quail, Japanese
COTURNIX COTURNIX JAPONICA

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8362 Muscle	Ingestion	a) Not given b) Not given	a) 17+/-11 ppb b) 22+/-11 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8363 Ovary	Ingestion	a) Not given b) Not given	a) 72+/-26 ppb b) 57+/-11 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
8364 Testis	Ingestion	a) Not given b) Not given	a) 1+/-2 ppb b) 5+/-3 ppb	a) After fed commercial grade b) After technical grade Fed 2 mo on ration sprinkled with 10 mg active substance/100 g feed (100 ppm). Daily intake was 3 mg/day/animal. Each mean was of 24 determinations. GC-EC
DELIBERATE EXPOSURE; BIRDS; TERRESTRIAL; EGGS; ADIPOSE TISSUE; MUSCLES; BONES; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; TESTES; OVARIES; FEATHERS; DIGESTIVE TRACT; PESTICIDES; PESTICIDE RESIDUES David, D. 1982 Bulletin of Environmental Contamination and Toxicology 28:733-739				

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester
52645-53-1
C21-H20-Cl2-O3
MW 391.3, MP 34-39 C, BP 200 C at 0.01 mm Hg, VP 3.4X10(E-7) mm Hg at 25 C

Trout, rainbow
SALMO GAIRDNERI

Tissue	Cases Exposure Route	Range	Mean	General Information
8365 Adipose	a) 6 b) 6	a) 0.125-2.2 ug/g b) 0.22-1.8 ug/g ug equivalents/g wet wt	a) Not given b) Not given	a) Cis-isomer b) Trans-isomer At 2 and 24 hr of exposure in 50 L tanks containing 5 ug/L ([C-14]-alcohol moiety), specific activity 0.14 uCi/ug. Values estimated from graphs. Wisconsin, Adell Scintillation counting
8366 Bile	a) 6 b) 6 c) 6 d) 6	a) 12 ug/ml b) 22 ug/ml c) 7 ug/ml d) 15 ug/ml ug equivalents/ml	a) Not given b) Not given c) Not given d) Not given	a) Cis-isomer after 4 hr exposure b) 8 hr c) Trans-isomer after 4 hr exposure d) 8 hr Water levels in ug/ml were 0.0043, 0.0043, 0.0046, 0.0044, respectively. Wisconsin, Adell

(next page)

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester
52645-53-1
C21-H20-Cl2-O3
MW 391.3, MP 34-39 C, BP 200 C at 0.01 mm Hg, VP 3.4X10(E-7) mm Hg at 25 C

Trout, rainbow
SALMO GAIRDNERI

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8367 Blood	a) 6 b) 6	a) 0.07-0.10 ug/g b) 0.07-0.10 ug/g ug equivalents/g wet wt	a) Not given b) Not given	a) Cis-isomer b) Trans-isomer At 2 and 24 hr of exposure in 50 L tanks containing 5 ug/L ([C-14]-alcohol moiety), specific activity 0.14 uCi/ug. Values estimated from graphs. Wisconsin, Adell
8368 Liver	a) 6 b) 6	a) 0.5-1.4 ug/g b) 0.75-1.5 ug/g ug equivalents/g wet wt	a) Not given b) Not given	a) Cis-isomer b) Trans-isomer At 2 and 24 hr of exposure in 50 L tanks containing 5 ug/L ([C-14]-alcohol moiety), specific activity 0.14 uCi/ug. Values estimated from graphs. Wisconsin, Adell
8369 Muscle	a) 6 b) 6	a) 0.03-0.13 ug/g b) 0.02-0.12 ug/g ug equivalents/g wet wt	a) Not given b) Not given	a) Cis-isomer b) Trans-isomer At 2 and 24 hr of exposure in 50 L tanks containing 5 ug/L ([C-14]-alcohol moiety), specific activity 0.14 uCi/ug. Values estimated from graphs. Wisconsin, Adell
DELIBERATE EXPOSURE; AQUATIC; FISHES; BLOOD; BILE; LIVER; MUSCLES; ADIPOSE TISSUE; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION Glickman, A.H.; Hamid, A.A.R.; Richert, D.E.; Lech, J.J. 1981 Toxicology and Applied Pharmacology 57:88-98				

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester
52315-07-8
C22-H19-Cl2-N-O3
MW 416.3, MP 60 C, VP 3.8X10(E-8) mm Hg at 70 C

Cattle
BOS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8370 Milk, fat	10	a) Not detected-4.2 ug/kg b) Not detected-5.4 ug/kg c) Not detected-9.6 ug/kg d) Not detected-7.4 ug/kg e) Not detected-9.2 ug/kg	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 1 d b) 3 d c) 7 d d) 14 d e) 21 d Times after implantation of ear tags impregnated with 806 mg. Non-detected levels $<$4 ug/kg. Levels considered negligible and found in only 5 of 10 animals. 2 Ayrshire cows (Prince Edward Island) and 8 Holstein cows (Guelph). None detected before tagging. Canada
MILK; CATTLE; TERRESTRIAL; DELIBERATE EXPOSURE; CANADA; ADULTS; INSECTICIDES; BIOACCUMULATION; LACTATION Braun, H.E.; Frank, R.; Miller, L.A. 1985 Bulletin of Environmental Contamination and Toxicology 35:61-64				

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester
52315-07-8
C22-H19-Cl2-N-O3
MW 416.3, MP 60 C, VP 3.8X10(E-8) mm Hg at 70 C

Chicken
GALLUS GALLUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8371 Adipose	18 Ingestion	0.05-0.03 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.12 ppm, d 5. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8372 Blood	18 Ingestion	4.20-0.03 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, on d 1, followed by sharp decrease. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8373 Brain	18 Ingestion	1.2-3.2 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 3.3 ppm, d 7. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8374 Eggs	30 Ingestion	a) 0.07-0.05 ppm b) 0.04-<0.01 ppm Ranges of means	a) Not given b) Not given	a) Egg yolk. Peak, 0.21 ppm, d 4 b) Egg white. Peak, 0.23 ppm, d 4 Day 1 and d 10 after single dose to hens of mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Eggs collected daily from white leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8375 Heart	18 Ingestion	0.70-0.35 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.80 ppm, d 3. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8376 Kidney	18 Ingestion	0.60-0.15 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.65 ppm, d 7. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8377 Liver	18 Ingestion	0.04-0.03 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.16 ppm, d 3. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC

(next page)

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester
52315-07-8
C22-H19-Cl2-N-O3
MW 416.3, MP 60 C, VP 3.8X10(E-8) mm Hg at 70 C

Chicken
GALLUS GALLUS

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
8378 Ovary	18 Ingestion	0.075-0.025 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.075 ppm, d 1. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC
8379 Skin	18 Ingestion	0.04-0.03 ppm Range of means	Not given	Day 1 and d 14, at sacrifice, after single-dose mixture of 10 mg each fenvalerate, cypermethrin, and deltamethrin/kg. Peak, 0.13 ppm, d 5. White leghorns, wt 1.45-1.68 kg. Estimated from graph. Egypt GC-EC

PESTICIDE RESIDUES; PESTICIDES; CHICKENS; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; AGRICULTURE; ADIPOSE TISSUE; BLOOD; BRAIN; KIDNEYS; LIVER; OVARIES; HEART; SKIN; EGGS; EGYPT

Saleh, M.A.; Ibrahim, N.A.; Soliman, N.Z.; El Sheimy, M.K. 1986 Journal of Agricultural and Food Chemistry 34:895-898

DDT, total (No postings in CHEMLINE).
C14-H9-Cl5
MW 354.50

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
8380 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.10 ug/g b) 0.32 ug/g c) 0.08 ug/g d) 0.17 ug/g Wet wt Geometric	a) 1 composite sample from Lake Verret b) 1 from Bayou Petite Prairie c) 2 from Spring Bayou d) 3 from Raccouri Old River Collected 6/81, 2.3-6.6% lipids, wt 307-431 g. Louisiana, Atchafalaya River Basin GLC

FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS

Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586

DDT, total (No postings in CHEMLINE).
C14-H9-Cl5
MW 354.50

Bass, largemouth
MICROPTERUS SALMOIDES

Tissue	Cases Exposure Route	Range	Mean	General Information
8381 Body, whole	132	7-109 ug/kg Wet wt	68 ug/kg Wet wt	Subadults from 3 station, 1) Boone, 73 km upstream from dam, 3) In the reservoir, 3) Saylorville, 3 km downstream from dam. 10/77-10/78. Saylorville reservoir a new impoundment. Iowa, Des Moines River, Saylorville Reservoir GC-EC

ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; BODY; DIELDRIN; DDT; HEPTACHLOR EPOXIDE; PESTICIDES; PESTICIDE RESIDUES; WATER POLLUTION; FOOD CONTAMINATION; IOWA; INSECTICIDES

Leung, S.-Y.T.; Bulkley, R.V.; Richard, J.J. 1981 Pesticides Monitoring Journal 15(3):117-122

Bass, rock
AMBLOPLITES RUPESTRIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8382 Body		Not applicable	0.113 mg/kg	Fox River, WI, above DePere, 10/15/80. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION

DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

Bat

Tissue	Cases Exposure Route	Range	Mean	General Information
8383 Carcass				Review. Part of extensive coverage of organochlorines and metals found in surveys and some experimental feeding studies. 25 species in 5 countries were surveyed. USA: Nigeria; England; Australia; Mexico

ENVIRONMENTAL EXPOSURE; REVIEW; DELIBERATE EXPOSURE; TERRESTRIAL; BATS; CARCASS; BODY; LIVER; ADIPOSE TISSUE; BRAIN; GASTROINTESTINAL SYSTEM; MAMMARY GLANDS; MILK; HEART; LUNGS; KIDNEYS; SKIN; MUSCLES; HAIR; PESTICIDES; PESTICIDE RESIDUES; INSECTICIDES; DDT; DDD; DDE; DIELDRIN; LINDANE; POLYCHLORINATED BIPHENYLS; MIREX; HEPTACHLOR EPOXIDE; OXYCHLORDANE; SELENIUM; MERCURY; LEAD; METALS

Clark, D.R. 1981 U.S. Department of the Interior, Special Scientific Report - Wildlife No. 235, 27 pp.

DDT, total (No postings in CHEMLINE).
C14-H9-Cl5
MW 354.50
Blackbird
TURDUS MERULA

Tissue	Cases Exposure Route	Range	Mean	General Information
8384 Muscle	1	Not applicable	0.06 ppm Wet wt	Adult, wt 94 g. Shot 7/76. Sweden, Vastergotland, Vanersborg GC-EC

MUSCLES; BIRDS; DUCKS; AQUATIC; TERRESTRIAL; ENVIRONMENTAL EXPOSURE; SWEDEN; POLYCHLORINATED BIPHENYLS; MERCURY; DDT; CHLORINE ORGANIC COMPOUNDS; DIETS; WATERFOWL; EGGS
Lindberg, P.; Odsjo, T.; Reutergardh, L. 1985 Archives of Environmental Contamination and Toxicology 14:203-212

Blackbird, red-winged
AGELAIUS PHOENICEUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8385 Carcass	44	Not detected-0.07 ppm Wet wt	0.01+/-0.01 ppm S.E. Wet wt Arithmetic	Detected in 1 of 5 composite samples. Nonmigratory omnivores prey of peregrine falcon, shot 5/80-7/80. Samples excluded beak, tarsi, GI tract, and feathers. Detection limit was 0.05 ppm wet wt. Colorado; Utah; Idaho; Oregon; Montana GC-EC

CHLORINE ORGANIC COMPOUNDS; BIRDS; CARCASS; PESTICIDE RESIDUES; ENVIRONMENTAL EXPOSURE; ADULTS; UTAH; IDAHO; MONTANA; TERRESTRIAL; WYOMING; SOUTH DAKOTA; COLORADO; NEW MEXICO; OREGON; DDE; DDT; DIELDRIN; HEPTACHLOR EPOXIDE; HEXACHLOROCYCLOHEXANE; POLYCHLORINATED BIPHENYLS; HEXACHLOROBENZENE; COMPARATIVE EVALUATIONS; PESTICIDES
DeWeese, L.R.; McEwen, L.C.; Hensler, G.L.; Petersen, B.E. 1986 Environmental Toxicology and Chemistry 5:675-693

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8386 Body		Not applicable	0.09 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC

FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION
DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594

DDT, total (No postings in CHEMLINE).
C14-H9-Cl5
MW 354.50

Bluegill
LEPOMIS MACROCHIRUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8387 Body	3-5/site	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) 3.235 mg/kg b) 28.680 mg/kg c) 5.606 mg/kg d) 29.191 mg/kg e) 16.184 mg/kg f) 4.844 mg/kg g) 0.761 mg/kg h) 11.182 mg/kg Lipid wt	a) San Joaquin River near Ft Washington b) At Firebaugh c) At Fremont Ford State Recreational Area d) Near Crow's Landing e) At South County Park f) Salt Slough below Lander Avenue g) Merced River below CA highway h) At George J. Hatfield State Recreational Area Organochlorine levels generally increased downstream, irrigated agriculture areas. July, 1981. Detection limit approximately 0.010 mg/kg. California, San Joaquin Valley GC-EC
ENVIRONMENTAL EXPOSURE; AQUATIC; FISHES; PESTICIDES; INDUSTRIAL CHEMICALS; CALIFORNIA; CHLORDANE; DDD; DDE; DDT; DIELDRIN; POLYCHLORINATED BIPHENYLS; PESTICIDE RESIDUES; WATER POLLUTION; INSECTICIDES; HERBICIDES; BODY Saiki, M.K.; Schmitt, C.J. 1986 Archives of Environmental Contamination and Toxicology 15:357-366				

Bowfin
AMIA CALVA

Tissue	Cases Exposure Route	Range	Mean	General Information
8388 Body, whole		a) Not given b) Not given c) Not given	a) 0.01 ug/g b) Not detected c) 0.08 ug/g Wet wt Geometric	a) 1 composite sample from lake Verret b) 1 from Lake Fausse Point c) 1 from Bayou Petite Prairie Collected 6/81, 2.2-5.6% lipids, wt 1310-2000 g. Detection limits not given. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

Bream
ABRAMIS BRAMA

Tissue	Cases Exposure Route	Range	Mean	General Information
8389 Muscle	1	Not applicable	4.3 mg/kg Fat basis	Caught 1980, Haggan River, 1.5% fat content. Sweden GC/MS; GC-EC
SWEDEN; FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; MUSCLES; LIVER; DDT; POLYCHLORINATED BIPHENYLS; BROMINATED HYDROCARBONS; WATER POLLUTION Anderson, O.; Blomkvist, G. 1981 Chemosphere 10(9):1051-1060				

DDT, total (No postings in CHEMLINE).
C14-H9-Cl5
MW 354.50
Buffalo
BUBALUS BUBALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8390 Adipose	17	0.116-3.143 ppm Wet wt	1.043+/-0.181 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.002 ppm. India, Uttar Pradesh GLC
8391 Bone marrow	5	0.337-5.038 ppm Wet wt	3.009+/-0.985 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.002 ppm. India, Uttar Pradesh GLC
8392 Brain	16	0.027-0.211 ppm Wet wt	0.138+/-0.012 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.002 ppm. India, Uttar Pradesh GLC
8393 Liver	17	0.043-0.635 ppm Wet wt	0.205+/-0.045 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.002 ppm. India, Uttar Pradesh GLC
8394 Muscle	22	0.011-0.081 ppm Wet wt	0.028+/-0.006 ppm Wet wt S.E.	Collected from slaughterhouses in and around Lucknow. Survey of organochlorines also included tissues from buffalo and chickens. Sensitivity 0.002 ppm. India, Uttar Pradesh GLC
ENVIRONMENTAL EXPOSURE; TERRESTRIAL; GOATS; BUFFALOS; CHICKENS; MUSCLES; BRAIN; LIVER; ADIPOSE TISSUE; BONE MARROW; DDT; LINDANE; BENZENE HEXACHLORIDE; DDE; TDE; PESTICIDES; PESTICIDE RESIDUES; FOOD CONTAMINATION Kaphalia, B.S.; Seth, T.D. 1981 Pesticides Monitoring Journal 15(2):103-106				

Buffalo, smallmouth
ICTIOBUS BUBALUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8395 Body, whole		a) Not given b) Not given c) Not given d) Not given	a) 0.42 ug/g b) 0.23 ug/g c) 0.25 ug/g d) 0.12 ug/g Wet wt Geometric	a) 2 composite samples from Lake Fausse Point b) 1 from Bayou Petite Prairie c) 1 from Spring Bayou d) 1 from Raccouri Old River Collected 6/81, 0.5-8.8% lipids, wt 687-1030 g. Louisiana, Atchafalaya River Basin GLC
FISHES; AGRICULTURE; PESTICIDE RESIDUES; AQUATIC; ENVIRONMENTAL EXPOSURE; WATER POLLUTION; BODY; METALS; DDT; LOUISIANA; COMPARATIVE EVALUATIONS; ALDRIN; DIELDRIN; ARSENIC; CADMIUM; SELENIUM; LEAD; MERCURY; ZINC; POLYCHLORINATED BIPHENYLS Winger, P.V.; Andreasen, J.K. 1985 Archives of Environmental Contamination and Toxicology 14:579-586				

DDT, total (No postings in CHEMLINE).
C14-H9-Cl5
MW 354.50
Bullhead
ICTALURUS sp.

Tissue	Cases Exposure Route	Range	Mean	General Information
8396 Body		Not applicable	0.262 mg/kg	Menominee River, WI, 8/15/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, brown
ICTALURUS NEBULOSUS

Tissue	Cases Exposure Route	Range	Mean	General Information
8397 Body		Not applicable	0.032 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				

Bullhead, yellow
ICTALURUS NATALIS

Tissue	Cases Exposure Route	Range	Mean	General Information
8398 Body		Not applicable	0.023 mg/kg	Ashtabula River, OH, 10/28/81. Composite sample. Part of Great Lakes Fish Monitoring Program to locate source areas of contaminants and detect emerging problems. Great Lakes harbors and tributaries GC-EC
FISHES; AQUATIC; ENVIRONMENTAL EXPOSURE; PESTICIDES; CHLORINE ORGANIC COMPOUNDS; CHLOROBENZENES; HEPTACHLOR EPOXIDE; HEXACHLOROBENZENE; HEXACHLOROCYCLOHEXANE; DDD; DDE; DDT; DIELDRIN; ALDRIN; INDUSTRIAL CHEMICALS; LINDANE; POLYCHLORINATED BIPHENYLS; POLYCYCLIC AROMATIC HYDROCARBONS; BIOLOGICAL MONITORING; OHIO; WISCONSIN; WATER POLLUTION DeVault, D.S. 1985 Archives of Environmental Contamination and Toxicology 14:587-594				