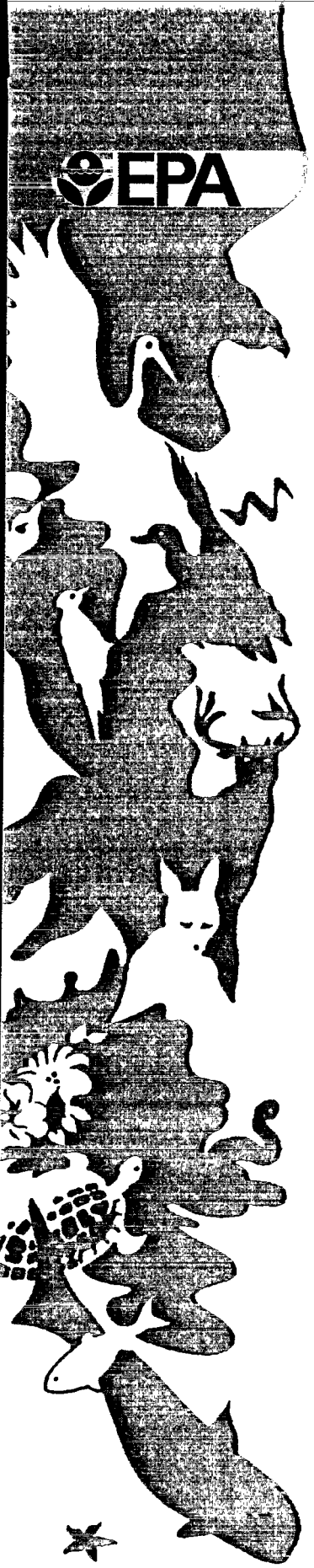
United States
Environmental Protection
Agency

Pesticides and
Toxic Substances (7506C)

EPA-735-K-94-017
August 1994



Protecting Endangered Species

Interim Measures

Livingston County, Kentucky

The information in this pamphlet is similar to what the U.S. Environmental Protection Agency (EPA) expects to distribute once our Endangered Species Protection Program is in effect. The limitations on pesticide use are not law at this time, but are being provided now for your use in voluntarily protecting endangered and threatened species from harm due to pesticide use. We encourage you to use this information. We also welcome your comments.

The Endangered Species Act is intended to protect and promote recovery of animals and plants that are in danger of becoming extinct due to the activities of people. Under the Act, EPA must ensure that use of pesticides it registers will not result in harm to the species listed as endangered or threatened by the U.S. fish and Wildlife Service, or to habitat critical to those species' survival. To accomplish this, the EPA expects to implement program requirements beginning in 1994. This program will protect endangered and threatened species from harm due to pesticide use.

EPA requests your comments regarding the information presented in this publication. Please let us know whether the information is clear and correct. Also tell us to what extent following the recommended measures would affect you typical pesticide use or productivity. This information will be considered by EPA during the final stages of program development.

Please submit comments to:

Interim Endangered Species Protection Program (7506C)
U.S. EPA
401 M Street, SW
Washington, DC 20460

About This Publication

This publication contains a County Map showing the Area within the county where pesticide use should be limited to protect listed species. These areas are identified on the map by a shaded pattern. Each shaded pattern corresponds to a species in need of protection.

The Shading Key shows the name of the species that each shaded pattern represents and often describes the shaded area. The area may be described in terms of Township, Range, and Section or by giving details about the habitat of the species.

The first column of the "Table of Pesticide Active Ingredients" lists the active ingredients for which there should be limitations on use to protect certain species. The next columns are headed by the shaded pattern of the species with Codes listed underneath them.

The Code indicates the specific limitation that is necessary to protect the species. The section titled Limitations on Pesticide Use explains the code.

Does This Information Apply to You?

To determine whether this information applies to your use of a pesticide, review the questions below. The information applies only if you answer "yes" to both questions:

- Do you intend to use pesticides within or near the shaded area on the county map?
- Are any of the ingredients listed on the front panel of your pesticide product label named in the "Table of Pesticide Active Ingredients"?

If you answer "yes" to both questions, you should follow the instructions on "How to Use This Information" to determine if you should limit use of the pesticide to help protect listed species.

If you answer "no" to either question, you should follow the usage directions on the pesticide product label.

Recycled/Recyclable
Printed with Soy/Canola Ink on paper that contains at least 50% recycled fiber

How To Use This Information

1) On the county map, find the specific shading patterns that cover, or are close to, the area where you intend to apply pesticides.
2) Read the descriptor in the Shading Key for those patterns; this may further identify the area involved.
3) In the "Table of Pesticide Active Ingredients," locate the active ingredients in the pesiticide you intend to apply.
4) Locate the codes to the right of the active ingredient name and under the shading patterns that apply to you.
5) When using the pesticide, you should follow the limitations indicated for those codes described under "Limitations on Pesticide Use."
6) If you are applying more than one listed active ingredient or applying a listed active ingredient in an area with more than one shaded pattern (species), multiple codes may apply. If so, you should follow the most restrictive limitation.
7) Read the information on Reducing Runoff and Drift on the back of this pamphlet.

Table of Pesticide Active Ingredients

Active Ingredient	Shading Pattern Code
AZINPHOS-METHYL	2c
BENOMYL	1c
CAPTAN	1c
CARBARYL	2c
CARBOFURAN	1c
CHLORPYRIFOS	
Alfalfa, Peanuts	43
Apples	41
Mosquito Larvicide Use	61
All Other Uses Except as a Termiticide	2c
DIAZINON	2c
DICOFOL	2c
DIMETHOATE	2c
ENDOSULFAN	2c
ESFENVALERATE	1c
ETHION	2c
ETHOPROP	1c
FENAMIPHOS	2c
FLURIDONE	20
FONOFOS	2c
MALATHION	2c
METHIDATHION	2c
METHOMYL	1c
METHYL PARATHION	1c
MEVINPHOS	2c
NALED	1c
NITRAPYRIN	1c
PARATHION (ethyl)	2c
PENDIMETHALIN	2c
PERMETHRIN	1c
PHORATE	1c
PHOSMET	1c
PHOSPHAMIDON	1c
PROPICONAZOLE	1
PYRETHRINS	2c
TERBUFOS	2c
THIOBENCARB	63
TRICHLORFON	2c

Limitations On Pesticide Use

Codes/Limitations

1 Do not apply this pesticide within 20 yards from the edge of water within the shaded area for **ground applications**, nor within 100 yards for **aerial applications**.

1c For **ground applications**, do not apply this pesticide within 20 yards from the edge of water within either the shaded area or the *upstream protection zone* (described under the Shading Key). For **aerial applications**, do not apply this pesticide within 100 yards from the edge of water within the areas described above.

2c For **ground applications**, do not apply this pesticide within 40 yards from the edge of water within either the shaded area or the *upstream protection zone* (described under the Shading Key). For **aerial applications**, do not apply this pesticide within 200 yards from the edge of water within the areas described above.

20 Do not apply **directly to water** within the shaded area.

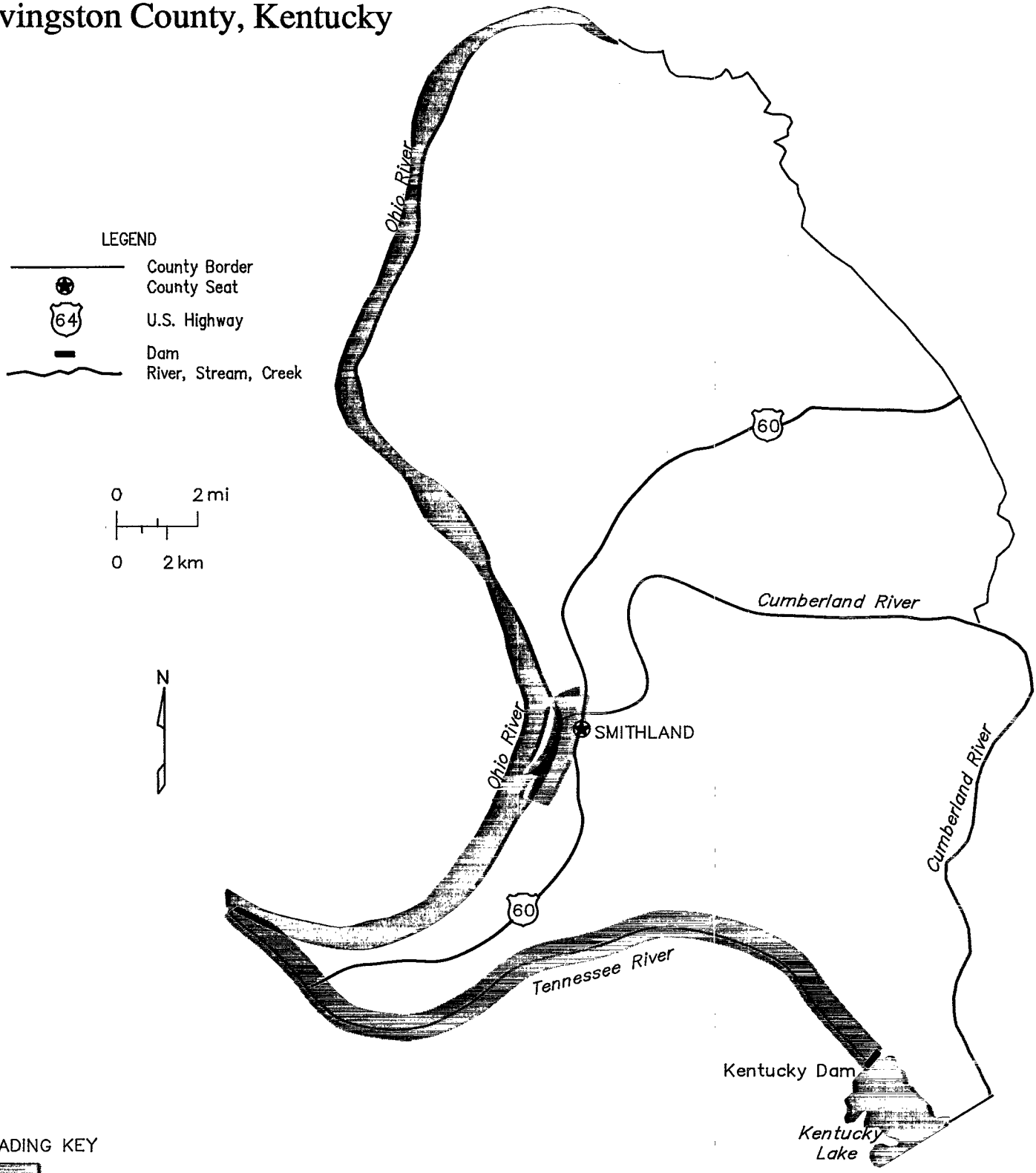
41 Do not apply this pesticide within ¼ mile from the edge of water within the shaded area for **ground applications**, nor within ½ mile for **aerial applications**.

43 Do not apply this pesticide within 100 yards from the edge of water within the shaded area for **ground applications**, nor within ¼ mile for **aerial applications**.

61 Do not apply this pesticide as a **mosquito larvicide** within the shaded area.

63 Do not apply this pesticide within the shaded area. In addition, do not apply within 100 yards of the shaded area for **ground applications**, nor within 1 mile for **aerial applications**.

Livingston County, Kentucky



SHADING KEY

Freshwater mollusks [One or more of the following: **Fat pocketbook**, *Potamilus (=Proptera) capax*. **Orange-footed (=pimple back) pearly mussel**, *Plethobasus cooperianus*. **Pink mucket pearly mussel**, *Lampsilis abrupta*. **Ring pink (=golf stick pearly) mussel**, *Obovaria retusa*. **Rough pigtoe**, *Pleurobema plenum*. **White wartyback pearly mussel**, *Plethobasus cicatricosus]*. Within the shaded areas shown on the map, pesticide use limitations apply on and along the rivers. The upstream protection zone is ½ mile up from the shaded area on the Cumberland River east of Route 60, as well as ½ mile up all tributaries that join the shaded areas.

Reducing Runoff and Drift

Careful use of pesticides can diminish harm to the environment and reduce exposure of endangered and threatened species to pesticides. Using pesticide runoff and drift measures may be helpful in keeping more of the applied pesticide on the field and may also lower your costs of pesticides.

Runoff

Where possible, use methods which reduce soil erosion, such as limited till and contour plowing; these methods also reduce pesticide runoff.

Where feasible, use application techniques such as T banding and in-furrow techniques, which incorporate the pesticide into the soil.

Pesticides with ground water warning labels are more likely to enter ground and surface water than those without such warnings. When possible, use a pesticide that does not contain a ground water warning label.

Keep Informed about changing weather conditions, and try to avoid pesticide application when heavy rainfall is expected.

Drift

Wind direction, speed, and evaporation are important factors in reducing drift. Most importantly, pesticides should be applied when the wind direction is away from areas of concern; try to avoid application during periods of high winds. Avoiding applications during the hottest part of the day, when evaporation is highest, will further reduce drift.

When high winds and excessive evaporation are not present, a drift retardant may be useful for aerial applications.

Using the largest droplet size compatible with the pesticide coverage will reduce drift. Typically, higher spray volumes will also result in less drift.

For the Protection of Your Land, Always Read and Follow Label Directions

EPA

United States
Environmental Protection
Agency
(7506C)
Washington, DC 20460

Official Business
Penalty for Private Use
$300