Wildlife of Wetlands



Wetlands Program U.S. Environmental Protection Agency

The EPA's Wetlands Program works to protects and restore our Nation's aquatic resources with other federal agencies, state, tribal, and local governments, and non-governmental partners. Through implementation of the Clean Water Act the Wetlands Program, with other programs in the Office of Water, seeks to maintain the chemical, physical and biological integrity of the Nation's waters

and to achieve a no net loss of wetlands and other valuable aquatic resources. In addition, the Program promotes wetland protection efforts through partnerships, education, grants, and sound science-based decision making to improve the quality of the Nation's watersheds and aquatic ecosystems. The Wetlands Program also encourages and enables others, in concert with meeting federal Clean Water Act responsibilities, to protect

and restore the functions and values of the Nation's

wetlands and associated aquatic ecosystems.

The photographs presented for each month were Finalists in EPA's 2003 Wetland Photography Contest; the small thumbnail photos received honorable mention. Photographs of a wide range of wildlife species that live in, or depend on, wetlands were submitted by amateur photographers from across the country.

For more information about wetlands, visit our web site at: www.epa.gov/OWOW/wetlands or call the Wetlands Helpline at: 1-800-832-7828

Cover photo: Jay Fleming Grand Prize 2003 Wetland Photo Contest Great Egret, Indian River Bay, DE



"All Paths Lead to Light" by Natalie Hamill, age 17 New Jersey. 2000 National Art Finalist, *River of Words* Contest.

Heron

High
on two silver legs
blue ice cream
tipped wings
stretching
golden vanilla
beak,
creamy white neck

creamy white neck bent over shimmering water

silky smooth peach fuzz wings flooded

with a perfect golden ray of light

even stars back away at its beauty.

Schoolchildren around the country are learning to explore and value the natural world through the annual River of Words Watershed Poetry and Art Contest, which is affiliated with the Library of Congress.



Abigail Hemenway, Grade 5 Pennsylvania 1997 Poetry Finalist River of Words Contest

http://www.riverofwords.org/



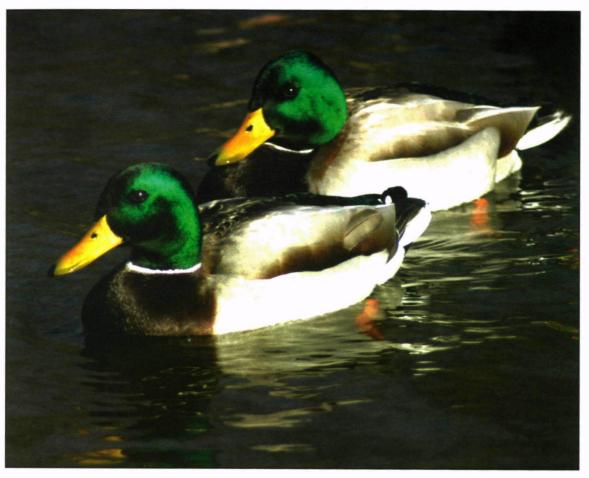
Jack Mills
Snow Geese at dawn, Bosque del Apache National Wildlife Refuge, NM

Bosque del Apache National Wildlife Refuge is famous for its wetlands, which are critically important for migrating birds in the desert southwest. Thousands of birds, including snow geese and a wide variety of other waterfowl, gather here to feed during the winter months.

JANUARY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
S M T W T F S 1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T 1 2 3 4 5 8 9 10 11 12 15 16 17 18 19 22 23 24 25 26	F S 6 7 13 14 120 21	John Pickles	New Year's Day	2	3
4	5	6	7	8	9	10
			0			
11	12	13	14	15	16	17
				•		
18	19	20	21	22	23	24
	Martin Luther King Jr. Day		•			
25	26	27	28	29	30	31

[&]quot;One touch of nature makes the whole world kin." William Shakespeare



Gary Armstrong Mallards, Green Bay, WI

The United States, Canada, and Mexico are all signatories to the North American Waterfowl Management Plan, a federal initiative to restore millions of acres of wetlands essential for wintering and nesting ducks, including Mallards. In support of the Management Plan, the North American Wetlands Conservation Act has protected and restored almost 16 million acres of wetlands and adjacent uplands in North America since 1989.

FEBRUARY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
	World Wetlands Day				O	
8	9	10	11	12	13	14
15	16	17	18	19	20	21
	Presidents' Day		Migratory Bird Conservation Act-1929		•	
22	23	24	25	26	27	28
29				4 5 11 12	JANUARY T W T F S 1 2 3 6 7 8 9 10 13 14 15 16 17	S M T W T F S 1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
	-	Bi	Ill Best		20 21 22 23 24	21 22 23 24 25 26 27

[&]quot;When the well is dry we know the wealth of water." Benjamin Franklin



Jay Osenkowski American Toad, Richmond, RI

Amphibians, such as the American Toad, are voracious eaters of insects. Vernal pools - small seasonal wetlands that contain surface water for only a few weeks in the spring - are especially important as they provide critical breeding habitat for many species of toads and other amphibians.

MARCH

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Lane Lefort	. 1	2	3	4	5	6
7	8	9	10	11	12	13
14 Pelican Island National Wildlife Refuge - 1903	15	16	17	18	19	20 Vernal Equinox
21	22	23	24	25	26	27
28	29	30	31	5 M I 1 2 3 8 9 1 15 16 1	4 5 6 7 0 11 12 13 14 4 7 18 19 20 21 1 4 25 26 27 28 1	APRIL 5 M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

[&]quot;The world is mud-luscious and puddle-wonderful." e.e. cummings



Robert Sofferman

Mallard on nest, Burlington Golf Course, VT

Wetlands is the collective term for marshes, swamps, bogs, and similar aquatic areas. Often called "nurseries of life," wetlands are among the most productive ecosystems on earth, comparable to tropical rain forests and coral reefs. Due to this productivity, wetlands provide an abundant source of food for more than 15 million ducks in the United States.

APRIL

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
MARCH S M I W I F S 1 2 3 4 5 6 7 8 9 10 11 12 1 14 15 16 17 18 19 2 21 22 23 24 25 26 2 28 29 30 31	3 2 3 4 5 0 9 10 11 12	T F S 1 1 5 7 8 13 14 15 20 21 22	Curtis Gibbens	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22 Earth Day	23	24
25	26	27	28	29	30 Arbor Day	

[&]quot;We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect." Aldo Leopold



Annette Jones, Esq. *Green Tree Frog*, Lake Waco, TX

This Green Tree Frog found a suitable home in a constructed wetland in Waco, Texas. The wetland was specifically created to improve water quality in the Waco River, the source of the city's drinking water. Recent research has found that in certain watersheds, nitrogen and herbicide runoff can be reduced by up to 50 percent by restoring wetlands in just 1 percent of the watershed.

MAY

May is American Wetlands Month

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
For more inform American Wetlar visit our web site www.epa.gov/ov	nds Month	5 M T W T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	F S. S M T 1 9 10 6 7 8 16 17 13 14 15 23 24 20 21 22	NE W T F S 2 3 4 5 9 10 11 12 16 17 18 19 23 24 25 26 30	Jennie Sauer	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21 Lewis and Clark starts-1804	22
23	24	25	26	27	28	29
30	31	3	"It is only a litt	le planet, but hov	v beautiful it is."	Robinson Jeffers

For more information about wetlands visit our website at: www.epa.gov/owow/wetlands/ or call 1-800-832-7828

Paul Wallace



John Karian Great Blue Heron in nest, Sandy CreekTownship, PA

One of the most significant benefits of wetlands is their ability to store immense quantities of floodwater and slowly release it over time, providing a natural buffer against destructive floods. Great Blue Herons also find value in wetlands as they often build their nests in or near swamps.

JUNE

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	Paul Gibson	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21 Summer Solstice	22	23	24	25	26
27	28	29	30	S M T W T 2 3 4 5 6 9 10 11 12 12 16 17 18 19 22 23 24 25 26 2 30 31	F 5 S M T 7 8 4 5 6 3 14 15 11 12 15 0 21 22 18 19 26	W T F S 1 2 3 7 8 9 10 3 14 15 16 17 0 21 22 23 24 7 28 29 30 31

[&]quot;In order to see birds it is necessary to become a part of the silence." Robert Lynd



Mary Hollinger Dragonfly, St. Mary's County, MD

Dragonflies provide a natural control of mosquito populations. Healthy wetlands can support large numbers of dragonfly nymphs, which prey upon mosquito larvae. As adults, dragonflies have a voracious appetite for flying mosquitoes, hence their nickname "mosquito hawk." Monitoring wetlands for water quality using bioindicators, such as dragonflies and other aquatic insects, is helping to determine the health of these important aquatic ecosystems.

JULY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Mundy	S M 1 1 6 7 8 13 14 15	2 3 4 5 1 9 10 11 12 8 1 16 17 18 19 15 1 23 24 25 26 22	M T W T F S 2 3 4 5 6 7 9 10 11 12 13 14 16 16 17 18 19 20 21 2 3 24 25 26 27 28	1	2	3
Independence Day	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

[&]quot;When we try to pick out anything by itself in nature we find it hitched to everything else in the universe." John Muir



Jay Osenkowski Gray Tree Frog, South Kingstown, RI

Wetlands are the vital link between land and water, and provide critical habitats for amphibians such as the Gray Tree Frog. Perhaps the world's best natural filter, wetlands break down and remove excess nutrients, sediment, and other contaminants in surface runoff. This acts to reduce the amount of pollutants reaching our rivers, lakes, and estuaries, as well as groundwater and drinking water sources.

AUGUST

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31		5 M T 4 5 6 11 12 13 18 19 20	1 2 3 7 8 9 10 5 3 14 15 16 17 1 0 21 22 23 24 1	SEPTEMBER M T W T F 5 1 2 3 4 6 6 7 8 9 10 11 2 13 14 15 16 17 18 9 20 21 22 23 24 25 6 27 28 29 30

[&]quot;I enter a swamp as a sacred place, a sanctum sanctorum. There is the strength, the marrow, of Nature." Henry David Thoreau



Alan Savitzky

Marbled Salamander, Isle of Wight County, VA

The Marbled Salamander is typically found in floodplains and other low-lying areas. As adults, salamanders live on land but all salamanders are born in wetlands, such as vernal pools, which are critical to their existence.

SEPTEMBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
S M T W 1 2 3 4 8 9 10 11 15 16 17 18 22 23 24 25 29 30 31	1 F S S M 5 6 7 12 13 14 3 4 19 20 21 10 11 26 27 28 17 18	OCTOBER T W T F S 1 2 5 6 7 8 9 12 13 14 15 16 19 20 21 22 23 26 27 28 29 30	1	2	3	4
5	6 Labor Day	7	8	9	10	11
12	13	14	15	16	17	28
19	20	21	22 Autumnal Equinox	23	24	25
26	27	28	29	30		L.A. Dils

[&]quot;For if one link in nature's chain might be lost, another might be lost, until the whole of things will vanish by piecemeal."

Thomas Jefferson



Paul Gibson Yellow-headed Blackbird, Nampa, ID

Wetlands provide excellent homes for all types of wildlife, including the Yellow-headed Blackbird and other songbirds. Even small wetlands are important as they provide a crucial source of food, as well as resting areas, for birds on their annual migration.

OCTOBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
SEPTEMBER S M T W T F S S M T W T F S 1 2 3 4 1 2 3 4 5 6 5 6 7 8 9 10 11 7 8 9 10 11 12 13 12 13 14 15 16 17 18 14 15 16 17 18 19 20 19 20 21 22 23 24 25 21 22 23 24 25 26 27 28 29 30 28 29 30 SOVEMBER S M T W T F S S M T W T F S 2 1 2 2 3 4 2 5 6 27 2 2 3 2 2 2 3 2 2 2 2 2 2 2 2 2 2 2 2			Jay	D'Bnen	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18 Clean Water Act-1972	19	20	21	22	23
24	25	26	27	28	29	30
31	"I go to natur	e to be soothed a	nd healed, and to	have my senses pi	ut in order." John	Burroughs



W.B. Folsom Florida Panther, Everglades National Park, FL

More than one-third of the threatened and endangered species in the U.S. live exclusively in wetlands, and nearly half use wetlands at some point in their life cycle. The Everglades, a unique ecosystem and home to the endangered Florida Panther, has been designated a World Heritage Site and a World Biosphere Reserve by the United Nations.

NOVEMBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2 Election Day	3	4	5	6
7	8	9	10	11 Veterans Day	12	13
14	15	16	17	18	19	20
21	22	23	24	25 Thanksgiving Day	26	27
28	29	30	J. Denn	5 M T 3 4 5 10 11 12 17 18 19	1 2 6 7 8 9 5 13 14 15 16 12 20 21 22 23 19	DECEMBER M T W T F S 1 2 3 4 6 7 8 9 10 11 2 13 14 15 16 17 18 9 20 21 22 23 24 25 9 27 28 29 30 31

[&]quot;We have lost a sense of respect for the wild river, for the complex workings of a wetland, for the intricate web of life that water supports." Sandra Postel



Dennis Demcheck American Alligator, Layfayette, LA

Wetlands are crucial components of watersheds, providing numerous functions, or services, for both people and wildlife, including this lurking American alligator. Some of these functions include: protecting and improving water quality, providing habitats for plants and animals, storing floodwater, and maintaining surface water flow during dry periods. In addition, 95% of the commercially harvested fish and shellfish in the U.S. are directly dependent on wetlands, hence the saying "no wetlands, no seafood."

DECEMBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
5 M T W 1 2 3 7 8 9 10 14 15 16 17 21 22 23 24 28 29 30	T F S S M 4 5 6 11 12 13 2 3 18 19 20 9 10 25 26 27 16 17	IANUARY T W T F S 1 4 5 6 7 8 11 12 13 14 15 18 19 20 21 22 25 26 27 28 29	1	2	3	4
5	6	7	8	9	10	11
12	North American Wetlands Conservation Act-1989	14	15	16	17	18
19	20	21 Winter Solstice	22	23	24	25 Christmas
26	27	28	29	30	31	William B. Folsom

[&]quot;To protect your rivers, protect your mountains." Emperor Yu



The above photographs were Finalists in EPA's 2003 Wetland Photography Contest.

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