This full-size poster profiles 11 wildlife species that are endangered. Color illustrations of animals and plants are accompanied by narrative describing their habitats and reasons for endangerment. The reverse side of the poster contains information on the Endangered Species Act, why protecting endangered and threatened species is important, how pesticides affect endangered and threatened species in the United States, what can be done to reduce the threat, and how the Endangered Species Protection Program works. The profiled species include Kemp's Ridley Sea Turtle, American Burying Beetle, Eastern Indigo Snake, Whooping Crane, Mission Blue Butterfly, Florida Manatee, Shortnose Sturgeon, Fresno Kangaroo Rat, Small Whorled Pogonia, Bald Eagle, Black Lace Cactus, and Black Footed Ferret. Contact information for the U.S. Fish & Wildlife Service and Endangered Species Coordinators in each of 10 U.S. Environmental Protection Agency regions is provided. (LZ)
Protecting Endangered Species From Pesticides
ENDANGERED MEANS IT

Loss of a single species from its ecosystem affects others that rely on it. The disappearance of one plant species may affect an entire food chain, starting with insects that live or feed on the plant, moving on to the birds and frogs that eat the insects, and ending with the larger animals like snakes, hawks, and foxes that prey on the birds and frogs.

Nearly 900 different species in the United States are listed as endangered or threatened.

To date, about 100 of the currently listed species have been identified as especially sensitive to some pesticides or other chemicals.

How Can I Get Further Information?

If you would like additional information about the Endangered Species Act, contact:

U.S. Fish & Wildlife Service
Publications Unit
1849 C Street, NW
Mail Stop 130-ARLSQ
Washington, DC 20240

If you would like more information on EPA's Program to protect listed species from pesticide exposure, including sample County Bulletins and other materials, contact the EPA office nearest you:

U.S. EPA
Public Information Center
(3404)
401 M Street, SW
Washington, DC 20460

Endangered Species Coordinator
U.S. EPA Region 1 (APP)
1 Congress Street
Boston, MA 02203

Endangered Species Coordinator
U.S. EPA Region 2 (MS-240)
2890 Woodbridge Ave., Bldg. 209
Edison, NJ 08837-3679

Endangered Species Coordinator
U.S. EPA Region 3 (3AT-32)
841 Chestnut Building
Philadelphia, PA 19107

Endangered Species Coordinator
U.S. EPA Region 4 (4-APT-MD)
345 Courtland Street, NE
Atlanta, GA 30365

Endangered Species Coordinator
U.S. EPA Region 5 (5SPT)
77 W. Jackson Boulevard
Chicago, IL 60604
About half of all counties in the United States have an endangered or threatened species that might be harmed by registered pesticide uses.

Extinction means a species is gone forever.

Many people think that animals like whales, eagles, and wolves are the only endangered species. Other endangered or threatened organisms include specific species of shrimp, frogs, butterflies, grasses, spiders, fish, clams, rice, snails, turtles, birds, orchids, squirrels, mice, deer, bats, and cacti.
The Endangered Species Act

In 1973, Congress passed the Endangered Species Act to protect America’s endangered and threatened plants and wildlife. The Act requires all Federal agencies to ensure that their actions—or actions they authorize others to take—are not likely to “jeopardize the continued existence of any endangered species . . . or result in the destruction or adverse modification of habitat” critical to the species’ survival. The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service are the Federal agencies responsible for placing species on and removing them from the endangered species list and for consulting with other Federal agencies regarding endangered species. FWS is also responsible for developing recovery plans for most species officially listed as endangered or threatened—known as “listed” species—and for ensuring compliance with the Act.

The Office of Pesticide Programs (OPP) at the U.S. Environmental Protection Agency (EPA) registers all pesticides used in the United States and sets conditions for their use. Because certain pesticides may pose a threat to listed species, OPP has developed the Endangered Species Protection Program to fulfill its requirements under the Act. The first goal of this Program is to protect listed species by preventing potentially harmful exposure to certain pesticides. The other goal of the Program is to avoid unnecessary limitations on the use of pesticides for the production of food, fiber, and forest products in the United States. Balancing these goals is critical to the Program’s success. OPP works closely with FWS and the U.S. Department of Agriculture (USDA) to develop and carry out the Program. OPP solicits comments and suggestions from all concerned parties to make the Program responsive, flexible, and effective.

Why Is Protecting Endangered and Threatened Species Important?

Biological diversity is essential for a healthy environment. Different species of plants and animals provide all of us with food, medicines, construction materials, and clothing. A healthy environment also offers many people recreational opportunities. Both known and unknown species may contain undiscovered benefits—new medicines, for example, or new genetic material from which to develop pest-resistant strains of staple crops such as corn, rice, and wheat.

Extinction occurs naturally, but scientific evidence shows that the rate of extinction has increased dramatically in the last century. The threat to species’ survival today is most often a result of poor environmental stewardship—human activities that lead to habitat destruction, pollution, the introduction of non-native organisms, and exploitation. Still more harm to individual species and to their remaining habitats may occur from exposure to certain pesticides.
How Can Pesticides Affect Endangered and Threatened Species in the United States?

Pesticides are one of many tools that the U.S. agricultural industry uses to produce food, fiber, and forest products in quantities that were unimaginable just a hundred years ago. This abundance helps to feed, clothe, and house people throughout the world. Special care must be taken, however, when pesticides are used in areas that overlap the habitats of endangered or threatened plants and wildlife. Species and their habitats may be harmed by direct exposure to pesticides. They may also be harmed indirectly by being exposed to pesticide runoff or drifting pesticide spray or by eating prey that has been exposed to pesticides.

How Does the Endangered Species Protection Program Work?

The Endangered Species Protection Program is species based. Some listed species are especially sensitive to certain pesticides, and exposure to these pesticides was one of the reasons for their becoming endangered or threatened. Reducing or eliminating pesticide exposure is likely to be critical to their recovery. Protecting these species is the top priority for the Program.

Most Vulnerable Species Addressed First

Three key agencies of the U.S. Government—EPA, USDA, and FWS—are coordinating their efforts to inform the general public about the Program and to educate pesticide users about how to protect endangered and threatened species from potentially harmful exposure. EPA's Office of Pesticide Programs also works with individual states to develop State Initiated Plans. Developing these plans allows states the flexibility to protect listed species from pesticide exposure while tailoring Program requirements to local conditions and needs of pesticide users.

How Can We Work Together To Reduce the Threat?

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Once the Office of Pesticide Programs (OPP) assesses the risks certain pesticides pose to the most vulnerable species, it identifies the steps necessary to avoid exposing these species to the pesticides. In making these assessments, OPP scientists take into account data collected by FWS and consult with FWS and USDA experts to identify alternative pest treatment methods that reduce the risk to the species. These methods usually involve modifying application techniques, limiting the areas where certain pesticides may be applied, or reducing the amount of pesticide that can be used within or adjacent to the habitat of the affected species.

**Use of Generic Labeling, Hotline, and County Bulletins**

OPP's program to protect listed species starts with a generic statement on the label of designated pesticide products. This statement notifies pesticide applicators that there may be limitations on the use of that pesticide in their county. To find out if there are any local pesticide-use limitations, they can call the toll-free Endangered Species Hotline number on the pesticide label. The hotline tells pesticide users whether there are protection measures for their county and where they can obtain a County Bulletin.

OPP's County Bulletins contain a map of part or all of the county showing areas where pesticide-use limitations are required. Bulletins also describe the species' habitat and explain the limits on using specific pesticides—limits designed to protect the species. Pesticide-use limitations generally occur only within or adjacent to the species' habitat as identified by the three Federal Government agencies and the states.

**Limited Impact on Users**

Pesticide-use limitations to protect endangered and threatened species apply only to outdoor uses of specific, identified pesticides or to indoor uses that can result directly in outdoor exposure. Generally, indoor uses of pesticides are exempt from the Program.

**A Balanced Approach**

EPA's Office of Pesticide Programs has developed a flexible protection program—one that is responsive to many of the hundreds of comments and recommendations submitted by farmers, pesticide applicators, wildlife specialists, environmental advocates, individual citizens, and state and local governments. By developing the Endangered Species Protection Program cooperatively with FWS, USDA, and the states, OPP seeks to protect America's endangered and threatened species from potentially harmful pesticide exposure and limit the impact on responsible pesticide users. OPP encourages states to develop programs that serve specific local needs of pesticide users and ensure protection for affected species.

Cooperation among pesticide users, the pesticide industry, and Federal, state, and local governments can make this effort succeed. Endangered and threatened species in the United States can be protected while farmers continue to use the tools they need to maintain the Nation's outstanding food and fiber production.
Kemp's Ridley Sea Turtle

This turtle starts life as an egg buried on a Mexican beach. Hatching at night, thousands of baby turtles cross the sand attracted by the light from the moon and stars on the water. They enter the Gulf of Mexico and swim away, wandering for years out in the Atlantic Ocean. Adult females always return to the same Mexican beach to nest. This is the most endangered of all sea turtles. It gets tangled easily in shrimp nets and drowns.

American Burying Beetle

This beetle used to live in 32 states. Now, it is found in only two. At night, it smells out a small dead animal and fights other beetles for the body. The winning male and female bury their prize and she lays eggs on it. Both parents stay underground until the eggs hatch.
Eastern Indigo Snake

This nonpoisonous snake can grow as long as 8 feet. It is a popular pet because it is slow and gentle. During very warm months, the snake is found along canal banks or near swamps, using crab holes for dens. The rest of the year, it lives in burrows made by other animals in the dry, sandy soils of old pine forests in Georgia and Florida. As forests have been cut down, the snake has lost some of its habitat.
Black Footed Ferret

This slender animal depends mainly on prairie dogs for food and shelter. It lives in their underground tunnels and hunts them at night. When prairie dogs disappeared from the Great Plains, ferrets vanished too. In 1986, the 18 ferrets known to be alive were moved to a Wyoming research institute. Their numbers have increased, and recently a few were released into managed wildlife areas.

Black Lace Cactus

This colorful plant is a favorite of...
Whooping Crane

The tallest North American bird, this crane has a wing span of 7 feet. Its call or "whoop" sounds like a trumpet. In the summer, it lives in Canada. For the winter, it flies 2,600 miles south to wetlands on the coast of Texas. The crane has lost its winter nesting area because many of the wetlands have been drained.

Shortnose Sturgeon

A fish can live to be 50 years old. It likes the s along the Atlantic coast from Canada to ng the sea floor. In the spring, the sturgeon where it was born to lay eggs. Dams on breeding areas.

Mission Blue Butterfly

This small butterfly spends its life near one plant—the lupine—which grows in wet, sandy, grassy areas around San Francisco. The butterfly has lost its home because these areas have been used as sites for houses, offices, factories, and farms.
6-inch stems grow alone or in small groups in wet, sandy soil near the Texas coast. The pattern of spines on each stem looks like lace. In areas where shrubs and brush have been cleared to plant grass for cattle grazing, the cactus has disappeared.

'Birds of America'

Bald Eagle

Our national bird is an endangered species success story! In 1963, scientists counted just over 400 pairs of bald eagles in the lower 48 states. Then, the pesticide DDT was banned. Hunting eagles was banned, too. Thanks to years of protection, there are now more than 4,000 pairs.
Fresno Kangaroo Rat

This rat lives in the dry grasslands of central California. It uses its short front legs to burrow into the ground and hide. Its long back legs help it hop around quickly at night when it hunts for seeds and green plants. Farming and cattle grazing have damaged the places where the kangaroo rat lives.

Florida Manatee

This gentle animal lives in the warm waters near the southeastern coast of the United States. An adult can be as long as 12 feet and can weigh as much as 3,000 pounds. It feeds on floating or underwater plants found in coastal inlets, rivers, and bays. When it comes up for air, the manatee may be injured or killed by motorboat propellers.

Small Whorled Pogonia

This orchid is one of the rarest in the United States. Plant collectors love it. It usually grows alone in open areas within hardwood forests. For years this plant was found all over the eastern half of the country, but it began to disappear when forests were cleared for development. Small populations now exist in only 10 states.