

Pesticides and the Endangered Species Protection Program

Introduction

This fact sheet will help landowners, land managers, planners, and developers understand the Federal Endangered Species Act (ESA). A better understanding of the ESA can help these persons plan, design, and implement farming, land development or other practices in harmony with the environment.

Animals or plants are classified as *endangered* if they face extinction throughout all or a large part of their range. Plants or animals are classified as *threatened* if they are likely to become endangered in the foreseeable future. Only a few animals and plants are endangered. Several, like the white tailed deer, are more abundant today than at any other time during history.

Organisms can be abundant, common, rare, threatened, or endangered in different parts of their range. For example, the American alligator has been classified as endangered or threatened in some areas, whereas in other areas it is abundant and may be legally harvested under the supervision of the state wildlife agency. The number and types of organisms listed as threatened or endangered change constantly because new species are added or others are deleted. Unfortunately, species are usually removed from the list because they have become extinct. The most current information on endangered and threatened species in your area may be obtained by contacting the U.S. Fish and Wildlife Service, your state's fish and wildlife department, wildlife interest groups, or the Cooperative Extension Service.

Why Protect Endangered and Threatened Species?

A primary reason for conserving rare plant and animal species is that our natural life support system depends on other organisms. Most plants and animals cannot live in all types of habitats (environments). Each needs certain qualifications before it can occupy a given habitat. Ecologically, each has a special position or role that it plays in relation to other organisms (a "niche"). This is why it is so difficult to move some organisms from one habitat to another. The specific "niche" into which they would fit may already be occupied by another organism, and specific qualifications needed cannot be met by the new habitat. We cannot predict what losing one species will do to the ecological balance of nature and our life support systems. Endangered species may act as important environmental barometers warning us that ecosystems are unhealthy.

There are many other reasons for saving endangered species. All of our domesticated plant and animal species, including corn, rice, beans, and peas, came from wild ancestors. Genetic material from wild relatives is now used to revitalize species that have been domesticated for centuries. It is very important to preserve this genetic diversity for these present uses and unseen future applications. Each year, new species of plants and animals are discovered, cultivated, harvested, or raised for human use. In addition, new uses of obscure plants and animals are discovered every year as we understand more about the life processes in living organisms.

Other practical uses for saving endangered and threatened species are the unique biochemical secrets contained in a plant or animal. These chemical or genetic factories have given us over half of our modern medicines. When a species becomes extinct, its particular biochemical information is lost forever.

In addition to practical reasons for maintaining rare species, many people believe there are ethical and moral reasons for maintaining endangered and threatened species. Once land ownership had strictly economic objectives with privileges but no obligations. Today, an increasing number of citizens and landowners believe it is the landowner's obligation to be a good steward of the land. In this sense, the "land" means the entire living community of animals, plants, soils, and water. A landowner or land manager makes decisions critical to the fate of living things that are considered common property of all of us. In addition, most endangered species were forced into their precarious position because of man's activities on the land. Because we are responsible for increased species endangerment, we should also be responsible for preserving them for future generations. Thus, federal and state laws have been enacted to protect endangered and threatened species and their habitats.

The Endangered Species Act

Congress passed the Endangered Species Act (ESA) in 1973 and amended it in 1988 to protect and conserve animals, plants, and their habitats that are threatened or in danger of becoming extinct throughout all or a significant portion of their range. The U.S. Fish and Wildlife Service (FWS) is mandated to protect endangered and threatened species. Section 4 of the ESA defines the process of listing a species as threatened or endangered, designates critical habitat for the species, and makes the FWS responsible for adopting a recovery plan that is not legally binding but acts as a management framework.

The ESA requires that a plan be developed to:

- actively conserve endangered species and provide for site-specific management actions to achieve their survival;
- allow species to be removed from the list when objective, measurable criteria are met;
- estimate financial costs and time required to meet those goals.

The law requires that the "critical habitat" the species needs to survive be protected.

The intent of the ESA has never been to stop construction projects, farming, forestry, or other projects. Rather, it seeks to insure that measures safeguarding endangered and threatened species and their habitats are included in project design, construction, and operation. From 1979 to 1986, the FWS consulted on 71,560 informal and 2,000 formal consultations. Only 18 projects were stopped (less than 1 percent). It was Congress's intent not only to stem the tide of extinctions, but to recover listed species to the point where protection was no longer needed.

Each federal agency, such as the U. S. Department of Agriculture (USDA) or Environmental Protection Agency (EPA), shall insure that their activities are not likely to jeopardize the continued existence of any endangered or threatened species or to result in any severe modification or destruction of their habitat. The EPA is responsible for regulating the use of pesticides. The FWS is responsible for providing biological opinions upon the interactions of specific pesticides and endangered species at risk. Because some pesticides may harm such species, EPA has been developing an Endangered Species Protection Program (ESPP) to protect vulnerable species and their habitats from the effects of pesticides. The EPA began developing this program in 1982 and published their initial proposals in 1987 and 1988. The proposal has since undergone revision and concentrates on providing the best protection for threatened and endangered species by focusing on the species themselves. To minimize impacts on pesticide users, the EPA will evaluate pesticides with emphasis on lower application rates as opposed to complete prohibition of use.

A variety of endangered and threatened species in the USDA's Southern Region are affected by pesticide use. Thus, precautions should be taken when using pesticides. An example is the hazard of pesticide contamination in streams that are homes to mussels. These organisms are filter-feeders, which require clean, free-flowing water to survive. Pesticide runoff into these streams may either kill the mussels directly or harm them indirectly by contaminating their food supply.

Section 9 of the Endangered Species Act of 1973, amended in 1988, states that it is unlawful for any person subject to the jurisdiction of the United States to take any endangered species

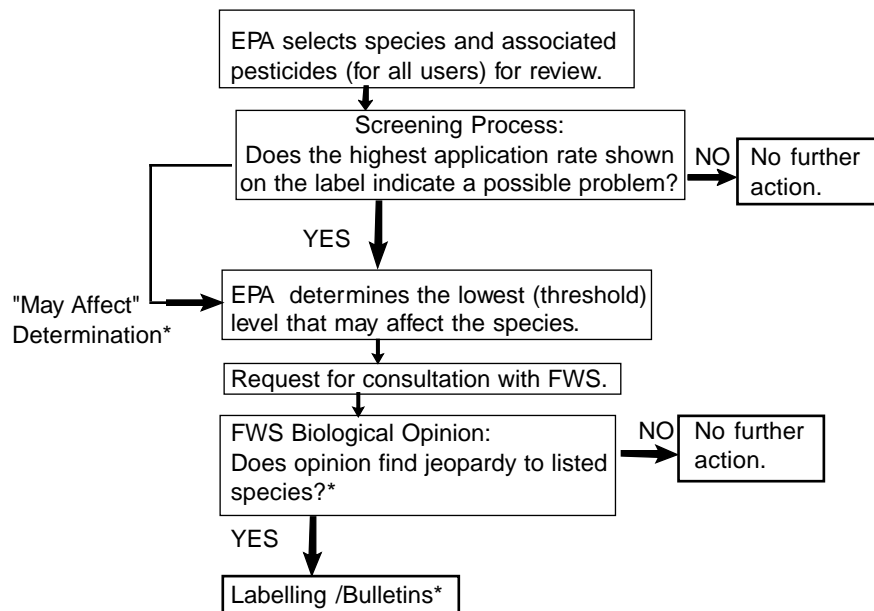
within the United States. “Any person who knowingly violates this provision under section 11 of the Endangered Species Act (1) may be assessed a civil penalty of not more than \$25,000 for each violation or imprisoned for not more than 6 months, or both; (2) upon conviction of a criminal violation, shall be fined not more than \$50,000 or imprisoned for not more than 1 year, or both. ‘Take’ is defined to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in such conduct.”

Regulations define “harass” as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an

extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.”

Regulations define “harm” as “an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.” Pesticide misapplications may be considered either harassing or harming wildlife in the context of these definitions.

The Endangered Species Protection Program Conceptual Approach

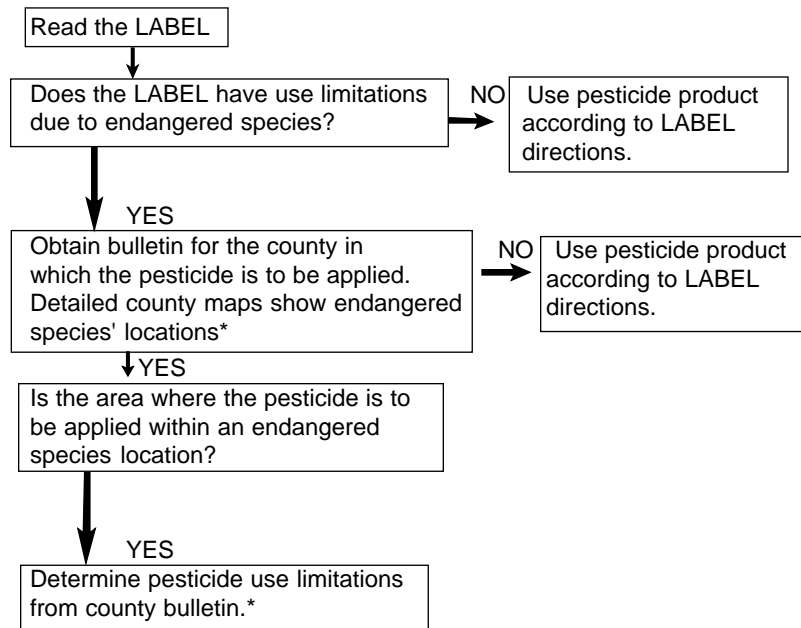


* Opportunity for public participation.

Provisions of the Endangered Species Protection Program

1. **Pesticide Labels and Bulletins** – Generic label statements will instruct pesticide users to consult county bulletins for use limitations. Bulletins will be updated annually if needed.
2. **State Involvement** – Some states are developing their own endangered species protection programs; others are developing education and training programs and maps that define affected habitats.
3. **Pilots** – Pilot (interim) programs are evaluating the program and determining the best methods for distributing information and gaining cooperation.
4. **Timing** – Enforceable measures will be implemented in the near future to protect listed species from pesticides. The EPA will issue Pesticide Registration (PR) Notices to the registrants of affected pesticide products to modify the products' labeling.
5. **Exemption of Public Health Emergencies** – The program also provides for an exemption for indoor uses in the case of a public health emergency where expeditious control of disease vectors such as mosquitoes and fleas is required.

How the Endangered Species Program Affects the Pesticide User



**Note: Interim county bulletins may be available.*

Source

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