



Endangered Species Recovery Program

Working with partners, the U. S. Fish and Wildlife Service (FWS) uses a range of conservation tools to “recover” endangered and threatened species—to ensure that they are able to survive on their own in the wild. These tools include restoring and acquiring habitat, removing invasive species, conducting surveys, monitoring individual populations, and breeding species in captivity to release them into their historic range.

Collaborative efforts are critical to recovery success. Our partners include Federal, State, and local agencies, Tribal governments, conservation organizations, the business community, landowners, and other concerned citizens.

As a result of these efforts, the Endangered Species Act (ESA) has been credited with saving species such as the California condor, black-footed ferret, peregrine falcon, and our Nation’s symbol, the bald eagle, from extinction.

What do we mean by recovery?

Recovery is the process that stops the decline of an endangered or threatened species by removing or reducing threats. Recovery ensures the long-term survival of the species in the wild. At that point, the species is recovered, and protection of the ESA is no longer necessary.

How does the Recovery Program work?

The FWS Recovery Program staff works with our partners at other agencies, States and local governments, and FWS programs to implement actions that help prevent the extinction of species, and prepares, coordinates, and implements recovery plans.

Recovery plans provide a road map with detailed site-specific management actions for private, Federal, and State cooperation in conserving listed species and their ecosystems. A recovery plan is a non-regulatory document, but it provides guidance on how best to help listed species achieve recovery.



Chris Seal / USFWS

Nelson’s checkermallow is a threatened species that has been reintroduced to the Baskett Slough National Wildlife Refuge pictured here.

How is species recovery achieved?

Recovering listed species cannot be accomplished solely on our national wildlife refuges, national forests, national parks, and other Federal lands because many species occur primarily or solely on private land. Achieving recovery for most species typically requires cooperative conservation with private landowners.

To stabilize, recover, and ultimately delist endangered and threatened species, the FWS engages a range of stakeholders.

Flexible management of threatened species

Section 4(d) of the ESA enables us to establish special regulations specifically for threatened species.

These “4(d)” or “special rules” allow us to customize the protections of the ESA to match the conservation needs of the species.

For example, the FWS developed a special rule to benefit the Apache trout,

a species that anglers may catch while attempting to catch other fish. To accommodate the accidental capture, the rule allows Apache trout to be caught as long as they are returned to the water. Revenue generated from fishing in waters that the trout inhabits helps conserve habitat.

Safe Harbor Agreements for private landowners

The FWS provides opportunities for private landowners to participate in conserving and recovering imperiled species by offering incentives. One example is the Safe Harbor program, available to non-Federal landowners who voluntarily implement conservation measures for listed species. Safe Harbor Agreements allow landowners to do good things for endangered and threatened species without concern about additional restrictions or regulations.

In the Southeast, landowners who participate in Safe Harbor Agreements for red-cockaded woodpeckers have been removing hardwoods in longleaf

pine stands, conducting controlled burns to remove undergrowth, and installing nest boxes. These activities help address the loss of habitat and promote breeding success since the endangered birds would otherwise need years to excavate nesting cavities in living longleaf pine trees. Safe Harbor Agreements assure landowners that the FWS will not require them to do more for the woodpeckers, including those attracted to the improved habitat, thereby alleviating concern about future land use restrictions under the ESA.

Grants to States, Territories, and private landowners

The FWS also annually offers millions of dollars in grants for endangered species conservation and recovery. Cooperative Endangered Species Conservation Fund grants are offered to States and Territories for an array of projects to benefit species that are listed, proposed, or candidates for listing.

In turn, these funds may be awarded to private landowners and groups for conservation projects. For more on our grants programs, visit <http://www.fws.gov/endangered/grants/>.

Reintroducing species into their historic range

Re-establishing a threatened or endangered species in its former range is often necessary so that there are enough populations to sustain recovery. To relieve concern that reintroductions may result in restrictions on the use of private, tribal, or public land, Congress added the provision for experimental populations under section 10(j) of the ESA.

An experimental population is a group of reintroduced plants or animals that is geographically isolated from other populations of the species and is not considered essential to the survival of the species as a whole. Experimental populations are afforded additional regulatory flexibility regarding management of the species.

For example, the 10(j) rules for black-footed ferrets makes certain incidental harm to ferrets legal when it happens as a result of otherwise lawful activities including traditional management or land use.

This flexibility has allowed FWS biologists to introduce ferrets into a number of sites on public and private lands from Mexico to Canada. With the special allowances afforded under the 10(j) rule, landowners can continue



Paul Marinari / USFWS

The black-footed ferret has been bred in captivity and reintroduced into its natural habitat.

to manage their lands without concern about breaking the law by inadvertently harming a ferret.

Through the captive-breeding program and the creation of 19 new populations, the number of black-footed ferrets has increased from only 18 ferrets in a captive-breeding program to more than 1000 animals in the wild.

Recovery efforts occur throughout the FWS

FWS programs are leading recovery efforts for species. For example, many of our national fish hatcheries are raising endangered or threatened species such as Higgins' eye pearly mussels at the Genoa National Fish Hatchery in Wisconsin. Many national wildlife refuges such as Florida's Hobe Sound were established to protect listed species such as green sea turtles and loggerhead turtles but also benefit a range of bird and plant species. The Partners for Fish and Wildlife program offers technical and financial assistance to private landowners to voluntarily restore wetlands and other habitat. The Partners program emphasizes the reestablishment of native vegetation and ecological communities for the benefit of fish and wildlife in concert with the needs and desires of private landowners. Our Law Enforcement program focuses on potentially devastating threats to wildlife by investigating wildlife crimes, regulating wildlife trade, helping us understand and obey wildlife protection laws, and working in partnership with international, State, and Tribal counterparts.

Who else helps to recover species?

Recovery cannot be completed without partners from all areas of land and species management. We rely on private landowners, Federal agencies,

state and local governments, Tribes, and non-profit organizations to complete our recovery tasks.

We work with land managers to create management plans that accomplish their objectives while benefiting listed plants and animals. We engage private landowners through our Partners for Fish and Wildlife and Grant programs. Our state counterparts are pivotal in sharing location information and lessons learned. Captive breeding is often completed with the help of zoos or plant materials centers. And we rely on members of the academic community to share valuable new information that aids in our conservation of listed species.

The recovery of each listed species is a collaborative effort that involves numerous partners.

What are some examples of recovery efforts?

The Aleutian Canada goose has benefited from both habitat restoration and reintroduction into formerly occupied habitat. Translocating young bald eagles into formerly occupied habitat was one factor in recovering the species to the point of delisting. Captive propagation has increased the numbers of whooping cranes and red wolves. Land acquisition and cooperation among the FWS and the States have protected important habitats for Houston toads and other amphibians.

Do recovery programs work?

Yes, Since 1969, 99 percent of listed species have been prevented from going extinct through the efforts of the FWS Recovery program and our many partners. But the task of recovery can be very challenging for many species. We are attempting to halt or reverse declines that in some instances have been more than 200 years in the making. Even in the face of a substantial increase in the number of species listed during the past decade, recovery efforts have allowed rare species to survive and, in some cases, thrive.

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[http://www.fws.gov/endangered/
what-we-do/recovery-overview.html](http://www.fws.gov/endangered/what-we-do/recovery-overview.html)**

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