

#### Introduction

The Endangered Species Act of 1973, [16 U.S.C. 1531 et seq.] (Act), has as its primary purpose the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation is the recovery of endangered and threatened species and their ecosystems, so that they no longer need the conservation measures afforded them under the Act. Among other things, the Act requires the development of recovery plans for listed endangered or threatened species (except for those species where it is determined that such a plan will not promote the conservation of the species), which serve as an important tool to organize and guide the recovery process, and ensure that recovery is achieved.

The Endangered Species Act amendments of 1988 (Public Law 100-478/50 CFR 1533(f)(3)) included a requirement that the Secretaries of the Interior and Commerce report to Congress every two years on the status of efforts to develop and implement recovery plans, and the status of all species for which recovery plans have been developed. This is the fourth Report to Congress on the status of the recovery program for federally listed endangered and threatened species under the Secretary of the Interior's jurisdiction. The Secretary of the Interior has delegated responsibility for endangered species recovery to the Fish and Wildlife Service.

## **Recovery Overview**

Recovery is the cornerstone and ultimate purpose of the endangered species program. Recovery is the process by which the decline of an endangered or threatened species is arrested or reversed, and threats to its survival are neutralized, so that its long-term survival in nature can be ensured. The goal of this process is to restore listed species to a point where they are secure, self-sustaining components of their ecosystem and, thus, to allow delisting.

Recovery of threatened and endangered species is a tremendous challenge.
Recovery must reverse declines that often have occurred over the course of

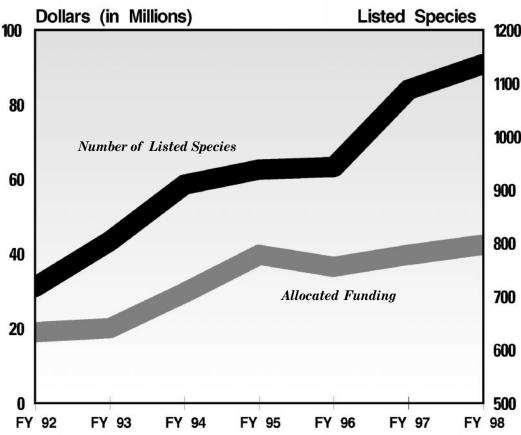


Figure 1: Recovery workload and allocated funding

two centuries. The habitat base for species at the time of listing is usually very limited. Many listed species are facing multiple threats. Reversing long-term declines and conserving the habitat of listed species, while accommodating society's other goals, requires finding innovative solutions. The many success stories of species now on the road to recovery illustrate what it takes to achieve recovery of endangered and threatened species. Successful recovery often takes many years of research, restoration, protection, and active management. The kev ingredient almost always necessary for all of this is the Service's role in finding and keeping many partners working together to achieve common goals over time.

The primary objectives of the Service's recovery program, while working in close cooperation with our partners, are to: 1) complete development of recovery plans within 2.5 years of a species being listed, to the maximum extent possible; 2) determine tasks necessary to reduce or eliminate the threats to the species; 3) apply available resources to the highest priority species and recovery tasks; and, 4) reclassify and delist

species as appropriate. Recovery tasks for a specific species might include: defining threats through research on biological requirements, managing threats through habitat protection and restoration, or in some cases, augmenting a severely depleted population with captive breeding. All of these activities and associated efforts must allow time for an endangered species to respond biologically to protective efforts on its behalf.

In addition to time, all of these activities require resources, both monetary and personnel. Figure 1 illustrates appropriated funding for endangered species recovery activities, relative to the recovery workload (expressed as number of listed species). Congressional funding authorizations to support the Service's recovery program have increased in recent years. Still, the increases have not kept pace with the increasing workload. This has resulted in a need to prioritize, and focus recovery efforts on those species that are declining the most rapidly or closest to the brink of extinction. Once species have been stabilized or start to increase. attention turns to other species in more critical condition. Thus, species

recovery slows, and fewer species have recovered to the point of delisting than might be desired. Under the circumstances, the Service has done an excellent job of keeping species from dropping off the edge and becoming extinct, and planning for their recovery (discussed later). However, additional increases in resources will be necessary in the future to finish the job of recovering species so that they no longer need the protections of the ESA.

## **Recovery Policy**

In 1994, the Service initiated a major effort to improve the overall national implementation of the ESA and began developing a suite of new national policies addressing certain aspects of implementation of the Act. A number of these policies address issues which can arise during the recovery process. The first four, published in July, 1994, were described in the Service's 1994 Report to Congress, and included policies on: 1) recovery plan participation and implementation; 2) the role of state agencies in ESA activities; 3) incorporation of

ecosystem considerations; and 4) peer review.

During the period covered by this report, October 1, 1994 through September 30, 1996, the Service continued to develop and implement policies to improve implementation of the ESA. The Act allows the listing of distinct population segments of vertebrate species. This can have implica-

tions for both reclassification and delisting. The Policy Regarding the Recognition of Distinct Vertebrate Population Segments, developed jointly with the National Marine Fisheries Service, clarifies the Services' interpretation of what constitutes a distinct population segment. Likewise a joint *Policy for* Conserving Species Listed or Proposed for Listing Under the Endangered Species Act While Providing and Enhancing Recreational Fisheries Opportunities was issued which promotes collaboration with other Federal, State, and Tribal fisheries

managers to conserve listed and proposed fishes. In addition, policies providing guidance and consistency in how controlled propagation may be used for the conservation of listed species and how intercross and intercross progeny should be treated under the Act were drafted and proposed for public comment; both of these will be completed soon.

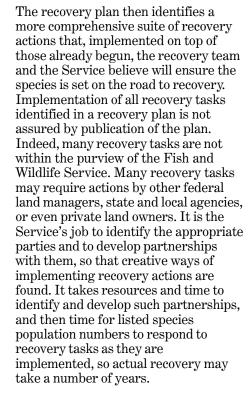
## **Recovery Planning and Implementation**

The Service's Recovery Program is multifaceted, involving the development of recovery plans for listed species, the implementation of those plans, and ultimately the delisting of species as they recover. Implementing such a program for almost 1000 listed species involves staff in Service offices around the country as well as many public and private partners in other Federal and State agencies, environmental organizations, businesses and private landowners throughout the country.

The job of recovering endangered and

threatened species may begin even before a species is formally listed. Where possible, the Service works with local governments and private land owners to develop candidate conservation agreements, which may arrest a species' decline and, in some

which must be listed anyway, development of a recovery outline (or days of listing. This ensures that recovery actions are begun immediately, rather than awaiting detailed recovery plan. If a conservation agreement already exists it can be folded easily into a recovery outline and expedite recovery implementation since partners may already be working together.



Finally, as a species begins to approach recovery, surveys are necessary to confirm that it has recovered as a selfsustaining, functioning element of its ecosystem. As mentioned earlier, federal appropriations have not kept pace with the increasing number of listed species in recent years. As a result, as some species populations are stabilized or they approach recovery. funds may be diverted to other, more critical species. In some cases, this means that the final key actions necessary to achieve full recovery have not been implemented due to inadequate funding. Finally, the Act requires that species that are delisted because they have recovered be monitored for at least five years after delisting, to ensure that removing the protections of the Act does not result in the species becoming threatened again.

# 1996 Status of Listed Species

As of September 30, 1996, 960 U.S. species were listed as threatened or endangered under the ESA. Nine hundred forty-three of these listed species were under the jurisdiction of the Fish and Wildlife Service. The remaining 17 species are under the jurisdiction of the National Marine Fisheries Service. Recovery "entities" are addressed in this report. Although the gray wolf is listed as a single species, three separate recovery entities exist: Eastern (timber), Northern Rocky Mountain and Mexican.



cases, actually prevent the need for proceeding with listing a species. For those species recovery strategy) is required within 60 finalization of a more complete,

Likewise, there are three recovery entities of piping ployer (Atlantic coast, Great Lakes and Northern Great Plains). The tables in the Appendix show the listing status, population status and the recovery plan development stage for 949 recovery entities under the jurisdiction of the Fish and Wildlife Service reported as of September 30, 1996. For the purpose of this report they are all called species. In addition, species that had been delisted as of September 30, 1996, because the species had recovered, or because of taxonomic revisions or the species had been determined to be extinct, are not included in the figures and statistics below.

Overall, by the end of fiscal year 1996, 352 (over 37%) of the U.S. listed endangered or threatened species had been stabilized or were improving. This number is very encouraging, especially given the large number of highly imperilled species that have been listed in the past decade. As of October 1, 1990, there were 581 U.S. listed species under the jurisdiction of the Fish and Wildlife Service. By September 30, 1996, 960 U.S. species were listed as threatened or endangered, 943 of which were under the jurisdiction of the Fish and Wildlife Service. This constitutes a 62 percent increase in listed species and concomitant recovery workload over a six-year period. A closer look at the data reveals that the recovery program is even more successful as recovery actions are implemented over several years, as illustrated in Figure 2. Fortyeight percent of those species listed before 1989 are now stabilized or improving and 58% of those species first listed between 1968 and 1973 are either stable or are improving.

When comparing the population trend data in Figure 2 to data in the 1994 Report to Congress on the Recovery Program, the percentage of stabilized or increasing species has remained stable in most of the 5-year intervals. This is not surprising, since recovery takes time, and two years is not a significant period of time in which to expect population level changes. Normal fluctuations in natural conditions, such as relatively wet or dry years, can temporarily influence

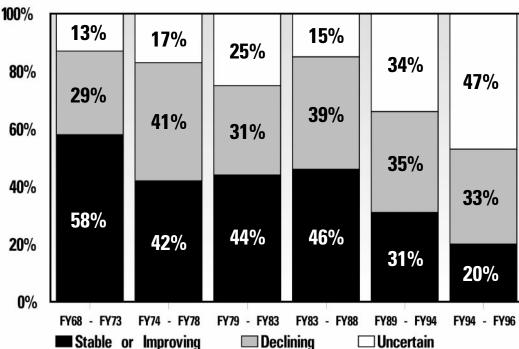


Figure 2: Current population trends of listed species according to time of listing

population trends for almost any species, so small fluctuations in the numbers of species with stabilized or improved population status are not unexpected. The largest change between 1994 and 1996 is seen in the increase in the percentage of species listed between 1989-93 that have been stabilized or begun to increase, from 22% to 31%. As this group had been listed for the shortest period of time before the 1994 Report, it was not surprising that this group had the poorest status at the time the 1994 Report was prepared. Similarly, it is not surprising that only 20% of the species listed most recently, in the 1994-96 category, were reported as stabilized or improving. Because nearly 60% of all species listed by September 30, 1996, were listed in the previous 7 years, we would not expect to see a large increase in the overall number of stabilized and improved species until these recently listed species have had time to realize the benefits of recovery planning and implementation. However, the improvement in the 1989-93 category suggests that quick action can be very important in stabilizing and improving the status of listed species.

The first step in moving a threatened or endangered species towards recovery is gaining an understanding of the threats it faces and the effects those threats have on population status. The ecological requirements for feeding, breeding, sheltering, and nurturing as well as threats may not be fully understood at the time a species is listed. Figure 2 illustrates the Service's ability, through the recovery program, to increase our knowledge of species' status and the threats that they face. This is reflected in the marked decrease over time in species for which population trends are uncertain or unknown—from 47% for species listed since 1993, the most recent years, to only 13% for those listed prior to 1974.

Another important step in recovering a listed species is the preparation of a recovery plan that outlines conservation measures necessary for species' recovery and identifies those State, Federal, Tribal and private partners that could contribute to the recovery effort. The Service and its partners have made tremendous progress in this area over the past two years. As illustrated in Figure 3, 73% of the 949 Service-managed species listed as of September 30, 1996, had final, approved recovery plans. An additional 17% had draft plans, 9% had plans in the first stages of development, and the remaining 1% were exempted from recovery planning requirements because the Service has determined that they would not benefit from recovery plan preparation. In comparison, at the end of September, 1994, only 54% of the listed species had final, approved plans, 21% had draft

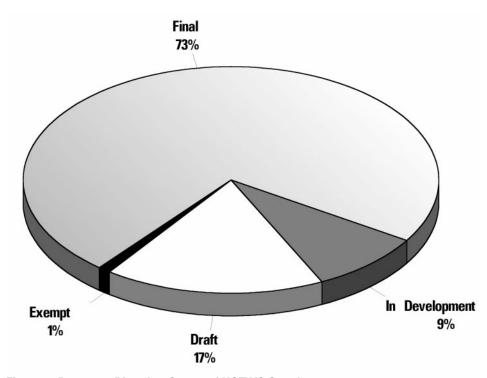


Figure 3: Recovery Planning Status of USFWS Species

plans, 18% had plans in the first stages of development, recovery planning for 6% had not yet begun, and 2% were exempt. The Service has been working aggressively to reduce and remove the backlog of species without recovery plans and to ensure that all plans are completed within 2.5 years of a species' listing.

But it is implementation of recovery actions that ultimately recover species. Thanks to the "team effort" of the Service and it's many partners in threatened and endangered species recovery, of all the species listed by September 30, 1996, 99% still survive and many of them are headed towards recovery, only 7 or less than 1%, have been officially recognized as extinct and subsequently delisted (several of these probably were extinct prior to their listing). In the same time frame, 6 species were removed from the list because they had recovered. Meanwhile, preventing the extinction of the remaining 99% is perhaps the biggest success story of the Act to date. Keeping these species from extinction provides the opportunity to develop and implement even more effective recovery actions for them. While recovery takes time, we are starting to see tangible results. Indeed, recently the Service identified 25 additional U.S. listed species that it anticipates proposing for delisting or reclassification from endangered to

threatened during FY 1998-2000 (Table 1), because they have recovered. Nine other species may be proposed for delisting or reclassification because of new information, taxonomic revisions, or because they are presumed extinct.

Nevertheless, some threats, such as habitat loss and degradation, and introduction of alien species (including diseases) are increasing. In some cases, new threats may cause new declines, even in species already on the road to recovery. Thus, monitoring and additional recovery actions may be necessary for many listed and vulnerable species, even some already on the road to recovery.

Additionally, nearly 80% of all listed species occur partially or entirely on private lands. The Service has been working diligently to establish programs that will provide flexibility and assurances to private landowners so that they will help conserve and recover listed and imperiled species. For example, the Service is currently finalizing policies and regulations on the proposed Safe Harbor and Candidate Conservation Agreements with Assurances programs. These are voluntary cooperative programs developed by the Service for the proactive management of private lands for the benefit of species.

These successes notwithstanding. preventing extinction, while critical, does not guarantee recovery (or delisting) of endangered and threatened species. Growing challenges face the Service's Recovery Program for endangered and threatened species that will require creative action, partnering, and a strong program, including funding for implementation, in order to ensure that the gains made to date are consolidated and ultimately become full recovery for species on the list. The attached report *The Road* Back: Endangered Species Recovery: Success with Partners outlines a number of examples of how the Service is developing creative actions with a diverse array of partners. In this way the Service is doing it's best to provide the greatest opportunity for ensuring recovery for the endangered and threatened species listed under the Endangered Species Act of 1973.

## **Summary**

Over the two-year period, FY95-FY96, the Service held the line for endangered and threatened species despite the major increase in workload over the last decade. Of all the species listed as of September 30, 1996, 99% still survive and many are headed towards recovery. For species that had been on the list for only a few years, the percentage of species that were stabilized or increasing had increased over FY94. The percentage stabilized or improving in other time frames held steady. The percentage of species with final, approved recovery plans increased significantly, from 54% to 73%, with most of the remaining species having plans either in draft or under development. In addition, the Service has made significant progress in identifying and creating partners for the recovery of endangered and threatened species. Still, the increasing workload, increasing threats in some quarters, and limited resources for implementing recovery actions have limited the potential for actual recovery of listed species. Significant additional resources will be necessary to realize the full potential of the Endangered Species Act and effect full recovery of all species on the list in a expeditious manner.

Figure 4: Possible FWS Delisting and Reclassification Actions for Fiscal Years 1998–2000 (as of May 11, 1998)

|  | Action Being Considered <sup>2</sup>   | Lead Region | Reason for Action            |
|--|--|-------------|------------------------------|
| American Peregrine falcon  | Proposed Delisting   | 1           | Recovery                     |
| Columbian white-tailed deer  | Proposed Delisting–Douglas County, OR;<br>Proposed Downlisting–Columbia River population | 1           | Recovery                     |
| Ash Meadows species (4): Ash Meadows Amargosa pupfish Spring-loving centaury Ash Meadows sunray Ash Meadows gumplant | Proposed Delisting   | 1           | Recovery                     |
| Tidewater goby   | Proposed Delisting   | 1           | Recovery and New Information |
| Tinian monarch (a bird) <sup>3</sup>   | Proposed Delisting   | 1           | Recovery                     |
| Hoover's wooly star  | Proposed Delisting   | 1           | Recovery and New Information |
| Truckee barberry³  | Proposed Delisting   | 1           | Taxonomic Revision           |
| Guam broadbill   | Proposed Delisting   | 1           | Presumed Extinct             |
| Mariana mallard  | Proposed Delisting   | 1           | Presumed Extinct             |
| Oahu tree snails (3 species) Achatinella spaldingi A. lehuiensis A. thaanumi   | Proposed Delisting   | 1           | Presumed Extinct             |
| Chamaesyce skottsbergii<br>var. Kalaeloana   | Proposed Delisting   | 1           | Taxonomic Revision           |
| Pahrump poolfish   | Final Downlisting  | 1           | Recovery                     |
| Loch Lomond coyote-thistle   | Final Downlisting  | 1           | Recovery                     |
| Eureka Valley plants (2 species)<br>Eureka Valley evening-primrose<br>Eureka dunegrass                               | Proposed Downlisting   | 1           | Recovery                     |
| Hawaiian hawk³   | Proposed Downlisting or Delisting  | 1           | Recovery                     |
| Island night lizard³   | Proposed Delisting   | 1           | Recovery                     |
| Lloyd's hedgehog cactus  | Final Delisting  | 2           | Taxonomic Revision           |
| Brown pelican (Gulf Coast)   | Proposed Delisting   | 2           | Recovery                     |
| Gray wolf³   | Proposed Delisting or Downlisting of Populations   | 3           | Recovery                     |
| Bald eagle   | Proposed Delisting   | 3           | Recovery                     |
| Missouri bladder-pod   | Proposed Downlisting   | 3           | Recovery and New Information |
| Running buffalo clover   | Proposed Downlisting   | 3           | Recovery and New Information |
| Dismal swamp shrew   | Proposed Delisting   | 5           | New Information              |
| Virginia roundleaf birch   | Proposed Delisting   | 5           | Recovery                     |
| Virginia northern flying squirrel  | Proposed Downlisting   | 5           | Recovery                     |
| Robbin's cinquefoil  | Proposed Downlisting   | 5           | Recovery                     |
| Heliotrope milk-vetch  | Proposed Delisting   | 6           | Recovery                     |
| Aleutian Canada goose  | Proposed Delisting   | 7           | Recovery                     |

<sup>&</sup>lt;sup>1</sup> This list is not intended to be comprehensive. Delisting or downlisting actions may be processed for species other than those appearing here.

<sup>&</sup>lt;sup>2</sup> The action actually proposed or finalized may differ from that currently being considered.

 $<sup>^3</sup>$  Although the Service has received a petition requesting delisting of this species, the possible delisting or downlisting action is a Service initiative rather than a result of the petition.