by Karene Motivans and Martha Balis-Larsen



Flat-spired three-toothed land snail Photo by Craig Stihler/West Virginia Division of Natural Resources

Biologists with northern flying squirrel at Canaan Valley NWR Photo by Leah Ceperley/USFWS



Species on the Brink of Recovery

The purpose of the Endangered Species Act is to conserve endangered and threatened species and the ecosystems upon which they depend. The ultimate symbolic action in a species' recovery effort is taking the species off the endangered and threatened species list because it is no longer threatened with extinction now or likely to become so within the foreseeable future. Final delisting and downlisting (i.e., changing a species' status from endangered to threatened) is achieved through time, steadfast dedication, and the use of existing and innovative techniques.

In the Midwest, for example, the prairie bush clover (Lespedeza leptostachya) has been helped by years of dedication toward recovery. Restoring the prairie bush clover focused on identifying and protecting populations in both the core and peripheral portions of its range. All that remains before delisting is to conduct a viability analysis of the protected populations to ensure that they will remain healthy.

The endangered Magazine Mountain shagreen (Mesodon magazinensis) is restricted to a single population found on the talus slopes of Magazine Mountain in the Ozark National Forest of Arkansas. Evidence has revealed that the range of this snail had not contracted; instead, it has always been endemic to this one site. As part of the construction of a state park on Magazine Mountain in 1995, the U.S. Forest Service began monitoring the snail for 10 years. At the end of this period, if the shagreen is still stable, the species could be considered for delisting. The final survey will be conducted in the spring of 2005, but at this time the results of the survey indicate that the population has remained stable.

One of the most recognized species on the list of endangered and threatened species is the gray wolf (Canis lupus). After decades of widespread persecution of the wolves due to perceived and real conflicts between wolves and human activities, it is estimated that only several hundred wolves survived in northeastern Minnesota and on Isle Royale, Michigan,



Left: Borax Lake chub

Photo by Jack Williams

Cheat Mountain salamander Photo by Mark Watson

with possibly a few scattered wolves in the Upper Peninsula of Michigan, Montana, and the American Southwest at the time the Endangered Species Act of 1973 was enacted.

Today, with improved and coordinated management, the introduction of wolves back into areas where they once existed, and the cooperation of the states, conservation organizations, many private landowners, and numerous other partners, gray wolf populations have rebounded in the East to over 3,000 wolves. In the Northern Rocky Mountains, there are an estimated 664 wolves in 44 packs in northwestern Montana. Idaho, and in and around Yellowstone National Park. Populations in both regions are exceeding their numerical recovery goals. As a result, in April 2003, the Service downlisted the gray wolf from endangered to threatened in the Eastern and Western Distinct Population Segments (the Southwest DPS is still listed as endangered) and established two new special rules under section 4(d) of the ESA that increases our ability to respond to wolf-human conflicts in these areas. At the same time, the Service announced its intention to propose delisting the gray wolf in the Eastern and Western DPSs within the near future. Another strong sign of its recovery progress.

Many of the other articles in this issue of the Bulletin describe the dedication and resolve required to achieve recovery of a species, including an article on the riparian brush rabbit (Sylvilagus

bachmani riparius), which would have gone extinct if the Service hadn't taken action, and Robert "Sea Otter" Jones' efforts to recover the Aleutian Canada goose (Branta canadensis leucopareia).

Recovery is on the horizon for many species on the list. Ninety-seven percent of U.S. species listed as of September 30, 2002, still survive and many of them are headed toward recovery. In fact, the Service considers over 500 listed species to be stable or improving in status. By any measure, this is a tremendous success. The many partners involved in contributing to recovery deserve the credit. Endangered or threatened species recovery is often a long, slow process, but the goal of preventing extinction and giving hope to other listed species is attainable. If you are interested in learning more about what you can do to help recover a species, please contact your nearest Fish and Wildlife Service office or see our web site at http:// endangered.fws.gov/recovery.

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Following delisting, the Service is obligated to monitor delisted species for at least five years to ensure a seamless transition off the endangered species list. Monitoring may involve population counts and making sure the species is reproducing in the wild, or evaluating the effectiveness of management actions. The cost of keeping tabs on delisted species is often shared with state and other partners. Species that are currently being monitored because they were recently delisted include the Robbins' cinquefoil, Aleutian Canada goose, and American peregrine falcon.