Common questions: the Endangered Species Act

The 1973 Endangered Species Act and its amendments comprise the nation's broadest and most powerful law protecting endangered species and their habitats. Below are commonly asked questions concerning the ESA. Answers were derived from sources listed. More discussion of the ESA appears on pp. 34, 35 and 43.

Extinctions have occurred since life began. Why are we so concerned about them now?

"The current rate of extinction is among the highest in the entire fossil record, in large part because of human activity," according to Michael Clegg, UCR geneticist and chair of the National Research Council (NRC) Committee on Scientific Issues in the Endangered Species Act.

NRC committee members estimated that the current extinction rate is 10 times

Sources

Definitions of "mitigation" and "mitigation banking" as well as recent figures on endangered species' status, were provided by Pat Foulk, public information officer, USFWS. Principal sources for other definitions and answers to common questions were:

Endangered Species Act of 1973 As Amended through the 100th Congress, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240

Gall, G.A.E. and Staton, M. (eds.) Integrating conservation biology and agricultural production, Agriculture, Ecosystems and Environment Vol. 42, nos. 1-2.

Jensen, D.B., Torn, M. and Harte, J. In Our Own Hands: A Strategy for Conserving Biological Diversity. California Policy Seminar Research Report 1990. University of California.

Meffe, G.K. and Carroll, C. R. 1995. *Principles of Conservation Biology* Sinauer Assoc. Sunderland, MA.

National Research Council. 1995. *Science and the Endangered Species Act*. National Academy Press, Washington, DC.

Parham, G. *Endangered Species Media Queries.* U.S. Fish and Wildlife Service. Washington, D.C.

U.S. Fish and Wildlife Service, June/July 1995. *Facts about the Endangered Species Act*. Department of the Interior, Washington, D.C. 20240 higher than the background rate. Other scientists argue the rate is even higher. Harvard University biologist E.O. Wilson developed estimates based on studies of the effects of human activity in the rain forest. He estimated the current extinction rate is 1,000 to 10,000 times higher than the background rate. His estimates are extrapolations from habitat loss and are subject to ongoing scientific debate.

Since it was passed in 1973, to what extent has the Endangered Species Act fulfilled its goals?

The answer depends on your viewpoint. Of 998 plants and animals listed as endangered or threatened since 1973, says the U.S. Fish and Wildlife Service (USFWS), 5 have recovered to the point where listing is no longer warranted. On the minus side, 7 endangered species are known to have become extinct and 14 others are thought to be so, according to June 1995 tallies.

As a whole, 38% of listed species are stable or improving, 33% are still in decline, 2% are believed extinct, and the status of 27% is unknown.

ESA opponents use these figures to argue that the act is not working; proponents contend that the track record is encouraging — considering the limited funding of the agency.

Why are many species still in decline or of unknown status?

One factor is the backlog in recovery planning, which is significant because it is large, according to the NRC report. To date, recovery plans have been approved for 55% (519) of the listed species, and draft plans waiting to be implemented would cover an additional 19% (176). According to USFWS, the backlog is the result of budget and staffing constraints.

Furthermore, there is a long "waiting list" for species seeking endangered status — candidates in categories 1 and 2 now number close to 4,000.

Why should we protect subspecies and populations?

Loss of biodiversity occurs along a continuum; genetic diversity declines and vul-



The California gnatcatcher is protected under a landmark conservation plan in Southern California (see p. 10).

nerability to extinction increases as each population disappears. Because populations are genetically differentiated from each other, some genetic diversity is irretrievably lost when a population is lost.

The NRC committee concluded that "The ESA's emphasis on distinct population segments — i.e. taxa below the rank of subspecies — is soundly based on science." They went on to say, "To help provide scientific objectivity in identifying population segments, the concept of the evolutionary unit (EU) should be adopted. The EU is a segment of biological diversity that contains a potential for a unique evolutionary future."

The NRC Committee also noted that it would be difficult, practically speaking, to restrict ESA protection to species only, because there is little scientific consensus on the meaning of the concept; it differs from discipline to discipline.

With limited resources, how can we expect to save all the endangered species?

Scientists emphasize the importance of preserving habitat if we are to have the maximum effect with limited resources. The NRC report stated, "For most species in decline and for most of those on the edge of extinction in the U.S. today, the most serious threat is habitat degradation or loss."

USFWS has emphasized the use of Habitat Conservation Plans (HCPs) to conserve listed species while allowing economic development to continue. A recent variation, the Natural Community Conservation Plan, takes the HCP a step further to protect multiple species and their habitats.