

## Science as Smoke Screen

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THE KAUAI CREEPER, A SPARROW-SIZED SONGBIRD RESTRICTED TO THE HAWAIIAN ISLAND OF KAUAI, would seem to fit anyone's definition of an endangered species. Fewer than 1500 individuals survive in an area of only 86 km<sup>2</sup>; its numbers are declining and it is under assault from non-native predators, pathogens, and competitors. Despite having been listed as "Critically Endangered" by the World Conservation Union, the Kauai Creeper hasn't yet earned a place on the U.S. endangered species list. In this respect, it has plenty of company. Thousands of U.S. species in grave danger of extinction have yet to be accorded protection under the Endangered Species Act of 1973 (ESA).

Fortunately, 1300 species, subspecies, and populations have been given protection under the ESA. Some, like the bald eagle, have recovered to a level that allows them to be removed from the list. Many others, although not yet out of danger, have been saved from extinction because of protection provided by the ESA. Furthermore, the U.S. Fish and Wildlife Service (FWS) has made very few errors in listing species during the 33 years it has been administering the ESA; only 10 of 1300 species (<1%) have had to be delisted because subsequent information indicated that the original decision to protect them was erroneous.

Given the enormous backlog of unprotected species in danger of extinction, one would expect Congress to expedite their protection. Instead, a bill to overhaul the ESA that passed the U.S. House of Representatives in September 2005 (H.R. 3824) would make it harder to protect endangered species, and similar "reform" legislation is now being discussed in the Senate. The pretense for the bill is to improve science, but instead H.R. 3824 would limit the use of well-tested population models for determining whether to add a species to the endangered list or for setting recovery goals. It would also add layers of time-consuming review before recovery plans could be finalized or federal agencies could act to help endangered species. Such changes will make the ESA neither scientifically sounder nor more effective.

Concerned that the scientific foundation of the ESA could be weakened by these sorts of changes, 17 scientific societies, including the Society for Conservation Biology—North America, Ecological Society of America, American Fisheries Society, Entomological Society of America, Society for Range Management, and The Wildlife Society, recently released a statement on the use (and misuse) of science in the ESA.\* The statement concludes that the FWS already has effective processes in place to gather and use the best available scientific information for decision-making. However, the groups recommended the creation of an independent science advisory panel, similar to those used at the Environmental Protection Agency and elsewhere, to advise the Secretary of the Interior on issues where significant scientific uncertainty exists.

Earlier protection of rare and declining species, before they reach the brink of extinction, will greatly increase the probability that those species can be recovered. The FWS should work with the scientific community to develop clear quantitative criteria for identifying what constitutes an endangered species. Similar criteria were developed by scientists and adopted in 2001 by the World Conservation Union. The new criteria ensured consistency in determining which species should be considered imperiled.

None of this can happen unless the agencies in charge of implementing the ESA have adequate funding. The median expenditure per listed species in 2004 was only about \$5500. Even this figure is somewhat deceptive because a mere 50 species (out of 1300) received 84% of all funds from the FWS and National Oceanic and Atmospheric Administration. Ultimately, too many species are dwindling for lack of attention because there isn't enough money to pursue conservation research and recovery actions in their interest. A recent study by environmentalists† recommended an increase of \$68 million in the annual budget (which is probably a conservative figure).

Critics of federal regulatory policies often plead for "sound science," a cryptic rallying cry for those who really want to discourage regulation. Congress shouldn't be allowed to get away with using it as a smokescreen for eviscerating an important and successful law like the ESA. Congress did well in unanimously supporting the designation of 11 May as the first official "Endangered Species Day." However, they'll need to do more than that to show that America's commitment to the goals of the ESA is serious.

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\*[www.conbio.org/Sections/NAmerica/ScientificSocietiesOnUSESA.pdf](http://www.conbio.org/Sections/NAmerica/ScientificSocietiesOnUSESA.pdf). †[www.defenders.org/greenbudget.pdf](http://www.defenders.org/greenbudget.pdf).

