

Protecting Endangered Species Habitat on Private Land

A Position Statement of the Society of American Foresters

*Initially adopted by the SAF Council on September 23, 1992, under the title *Reauthorization and Amendment of the Endangered Species Act*, revised periodically, and after thorough review revised and adopted by the SAF Council on June 8, 2002 and amended December 3, 2005. This position statement will expire on June 8, 2007, unless after thorough review the SAF Council decides otherwise.

Position

The Society of American Foresters (SAF) recognizes that biological diversity is a function of healthy, productive forests and believes that consistent with landowner objectives, forests should be managed to conserve and enhance biological diversity (SAF 1991, 1996). The Endangered Species Act of 1973 (ESA) is a regulatory approach to protect listed species and considers habitat protection an integral part of the effort (Buck et al. 2002). Under ESA, species of plants and animals may be listed as either “endangered” or “threatened” according to assessments of the risk of their extinction. The SAF endorses ESA’s goals and purposes because the conservation of these species and the habitats or ecosystems upon which they depend is important to society and the profession of forestry (SAF 1994). Professional foresters can contribute their knowledge, training, and experience to managing landscapes for the conservation of biological diversity (SAF 1996). The SAF agrees with a National Wildlife Federation position (NWF 1995): ESA can and should balance the needs of people with the urgent treatment of imperiled species. Furthermore, significant changes in the ESA, rather than bureaucratic discretion, are required to assure that balance is achieved in practice (NWF 1995).

The SAF recommends that Congress, when considering whether to reauthorize and amend the ESA, should consider changes that would:

- 1) clarify habitat protection on non-federal lands by reconsidering the statutory intent of “critical habitat” protection as it affects non-federal lands, and
- 2) require peer review of listings to ensure that high quality scientific data are used to identify:
 - a) species needing protection, and
 - b) essential “survival habitat” for those species (NRC 1995);
- 3) improve the recovery plan process by including:
 - a) identification of habitat essential for recovery, with analysis of economic and other impacts as the current law requires, and
 - b) involvement of non-federal landowners in plan development if their land is identified as essential for species recovery; and
- 4) provide incentives to encourage private landowners to protect habitat

Specifics are detailed in the **Recommendations** section.

Issue

Biodiversity protection and ESA conservation efforts raise many economic, political, and institutional issues that will not soon fade (Tobin 1990). The SAF has chosen to focus on the protection of habitat on non-federal lands. This issue directly affects many SAF members and their clients, and is something the forestry profession can meaningfully contribute to. It also

raises a host of related problems that could be improved by redesigning the ESA by clarifying how habitat essential for species conservation is to be protected.

One of the ESA's stated purposes is to "provide a means whereby the ecosystems upon which endangered species and threatened species may be conserved." The means to this end is the listing of individual species and designation of "critical habitat" essential for their conservation (NRC 1995).

In 1994, 90% of protected species had some portion of their habitat on private land and 37% of them were entirely dependent on private land (GAO 1994). However, the ESA does not identify a specific means for protecting habitat or ecosystems on non-federal lands. To fill the policy gap, the U.S. Fish and Wildlife Service (FWS) used the regulatory powers granted by the ESA (Houck 1993). ESA section 9 prohibits all persons from any action causing "take" of a protected species. ESA defines "take" to include "harm." The FWS regulations define "harm" broadly to include "significant habitat modification." In effect, habitat is fully protected wherever a species happens to be, whether or not critical habitat has been designated. This regulatory approach has proven to be problematic.

Critical habitat designation requires drawing lines on a map and performing economic analysis (Tobin 1990, Houck 1993). ESA requires the designation of "critical habitat" essential for species conservation at the time species are listed (Baldwin 1999). However, the FWS often does not designate critical habitat in part because it regards designation as a low priority activity providing only a marginal increment of protection (Buck et al. 2002). As discussed below, critical habitat also vexes private landowners and the courts.

The effect of critical habitat designation on private landowners is uncertain (Moore et al. 2000). Irrespective of actual regulatory impacts, many people perceive that private property within designated critical habitat areas is off limits, potentially lowering property values (Moser and Morrisette 2001). Some landowners fear that the presence of an ESA-listed species or the designation of critical habitat on their land will result in restrictions of current or future activities on their land and subsequent loss of all or some of their property value (Buck et al. 2002). There also is concern that designation of critical habitat could render them susceptible to third-party lawsuits. These perceptions are at least as important as reality (Tobin 1990).

Different appellate courts have arrived at different interpretations of what Congress intended with regards to critical habitat (see Bean and Rowland 1997, Feldman and Brennan 1997, SELS 2001). A series of lawsuits by citizen conservation groups has recently forced the FWS to spend much of their listing budget on court-ordered critical habitat designations. The Supreme Court ruled in *Sweet Home* (1995) that the FWS had devised a reasonable interpretation of "harm" and left the door open as to what "significant habitat modification" might mean (Feldman and Brennan 1997, SELS 2001).

A major ESA policy issue is whether to incorporate further protection for property owners and reduce regulatory impacts or whether to increase the protection afforded listed species (Buck et al. 2002). The broad reach of ESA habitat protection through the section 9 taking prohibition on habitat-altering activities on private lands raises the Fifth Amendment constitutional takings

issue (Feldman and Brennan 1997). It often imposes the costs of protection on a few for the benefit of the many. If the public is serious about protecting species, we must commit adequate resources to underwrite the true costs of species conservation and spread those costs fairly and evenly among those receiving the benefits—the American public (Ruckelshaus 1997).

Background

ESA is the “broadest and most powerful law” in the world for protecting species (NRC 1995). It has been amended several times since 1973, most recently in 1988. The authorization for spending under the ESA expired in 1992. The prohibitions and requirements have remained in force, with funds appropriated each fiscal year (Buck et al. 2002). Many amendments have been presented as reauthorization bills, but none has passed Congress. Reauthorization or amendment is difficult because ESA is one of the more contentious environmental laws, in part because the strict substantive provisions of the law can affect the use of non-federal lands (Buck et al. 2002).

The ESA recognizes that economic development activities can lead to species extinction and it provides the means for the two implementing federal agencies to identify, protect, and recover threatened and endangered species of plants and animals. The ESA goal is species conservation; “conserve” in the ESA context means federal agencies take whatever actions are necessary to recover protected species. Section 4 requires that species needing protection, and the habitats or ecosystems they depend on, are identified and “listed” through a rule-making process. Listing requires specifying the factors causing endangerment, or what ESA calls factors “affecting its continued existence.” For roughly 95% of protected species, habitat modification plays some role (Flather et al. 1994). Habitat is absolutely crucial for species survival; the ESA recognizes that strong provisions for habitat protection are necessary for species conservation (NRC 1995). The vast majority of protected species reached that status more or less indirectly, due to habitat loss (Buck et al. 2002).

Listing species and designating critical habitats merely sets the stage for the significant and controversial duties ESA imposes on federal employees and other parties (Bean and Rowland 1997). Section 7 prohibits federal agencies from any action causing “jeopardy” to a species or “adverse modification” of designated critical habitat. Congress also directed all federal departments and agencies to conserve endangered and threatened species. Section 9 gives FWS and National Marine Fisheries Service (NMFS) some authority over non-federal lands through the “taking” prohibition. Use of these powerful tools, or failure to use them, has led to conflict. Penalties for violators can include imprisonment for a year, criminal fines up to \$50,000 plus civil penalties of up to \$25,000 per violation. Any person can sue any other person suspected of violating the ESA “taking” prohibition.

The ultimate goal of the ESA is to recover threatened and endangered species (NRC 1995). To that end, recovery plans are required. They are to provide objective and measurable criteria as to when a species can be downlisted or delisted, intermediate goals, and costs of recovery actions. As of October 31, 2001, in the U.S., 1,249 species were protected; 975 are covered in recovery plans (Buck et al. 2002). The recovery plan was not envisioned in the original ESA. Recovery goals are not likely to be achieved without active management and strategies, such as incentives, that go beyond acquiring or regulating private land (Bean and Rowland 1997). In the future,

recovery plans could become the principal device for engaging private landowners cooperatively in species conservation efforts.

Recommendations

ESA is designed to protect species. We agree with this intent, however, through time as it has been implemented, there have been numerous implementation problems that have interfered and have possibly been counterproductive in meeting these goals. It is with this experience in mind that we propose the following recommendations as top priorities in revising the ESA. The SAF believes the ESA should be amended legislatively, rather than through administrative regulations, although changes in the administration of the ESA could improve its conservation effectiveness and provide relief to private landowners.

1) Clarify Habitat Protection Mandates and Regulations

The SAF urges Congress to do what two biologists recommended more than a decade ago: “exorcize the ambiguity of critical habitat” (Murphy and Noon 1991). Bridging this policy gap is a necessary first step in any attempt to make the ESA more effective at protecting habitat for species conservation on non-federal lands. A bill in the 106th Congress proposed amendments to the critical habitat requirements of the ESA, but was inadequate. It proposed moving designation from the listing process to the recovery process, but did not attempt to clarify the uncertain effect that critical habitat designation has on non-federal landowners. Some felt strongly that some designation should occur at the time of listing (Moore et al. 2000) and the bill did not pass.

A revised ESA should:

- Reconsider the need for designating “critical habitat” in the listing process. SAF advocates that this section of the ESA be given less priority in any revision of the Act. However, SAF recommends that agencies, at a minimum, identify what is known about habitat relationships and essential habitats in the preamble of proposed and final rules, including habitat areas and conditions necessary for the continued existence of the species. This information could then be used formally during the recovery planning process to identify “survival” or critical habitat and would provide a compilation of known data that would allow landowners and agencies to focus conservation efforts.

2) Require Peer Review of Proposals to List Species and Identify “Survival Habitat”

The identification of species that are “listed” as being protected by the ESA should continue, as it has since 1982, to be based solely upon the best scientific and commercial data available. But it should also be tempered by a judgment of the adequacy of that data. Ordinary citizens have demonstrated an ability to filter through scientific information, even when it contains contradictions, and come up with reasonable findings (Ruckelshaus 1997). But there must be some assurance that the best data are of high quality.

Some biologists have not supported peer review in ESA listings (NRC 1995, ESA’s ESA Committee 1996). However, if peer review is not part of the listing process it is otherwise

difficult to verify the adequacy of scientific data. The extra delay and expense of peer review likely will be more than offset by the increase in public confidence and trust that federal agency biologists are indeed making decisions with adequate data. Although the FWS has a policy to include peer review, it is sometimes not done, as in the case of the Alameda whip snake (SELS 2001).

To achieve peer review effectively, each proposal to list a species should be referred to an independent Select Biological Committee (SBC), comprised of federal and state government, university, and private sector scientists who are not involved with federal agency listing activities, prior to notification of a listing in the Federal Register. These scientists should have applicable knowledge or information on the species, its habitat, or the quality of data used in the listing process. The SBC would report its opinion on listing advisability to the Secretary. If the Secretary's subsequent decision to list is inconsistent with the SBC finding, the Secretary should disclose the inconsistency, and explain to the public the reasons for proceeding with the listing.

The designation of critical habitat is also currently required at the time of listing. However, critical habitat designation should include analysis of economic and other impacts of such designations. Thus, it is unreasonable to expect biologists to make timely listing decisions given this analytical burden. As described in recommendation 1) above, the SAF suggests that in the preamble of proposed and final listing rules, the regulatory agencies identify what is known about habitat relationships and essential habitats. Because this information will likely be used to form the core area of habitat essential for recovery, it would be important for effective habitat protection to base identification of habitat essential for survival on the best available data of the highest quality, as confirmed by an independent SBC review. Again, the extra expense and delay of peer review would likely be offset by increased public trust when essential habitat boundaries are delineated.

3) Improve the Recovery Plan Process

Recovery involves a mix of biology in setting species population goals and in land-use planning for altering practices that adversely modify habitat essential for species. The SAF believes that forest management is an integral part of recovery for many plant and animal species. Forest management techniques can be applied by properly trained professionals to aid in species recovery and produce other forest benefits.

Federal agencies have a responsibility to support the development and implementation of recovery plans and to work towards recovery of listed species. A key to recovery, and ultimately delisting, is mitigating the factors affecting the continued existence of listed species. In many cases, that will mean modifying land-use practices that affect habitat, i.e., the ecosystem upon which the species depends. Biologists have suggested that non-biological factors, including social, economic, and political considerations, also be explicitly identified in recovery plans in order to determine which factors contribute to species decline and recovery (Scott et al. 1995). When population goals have been met and factors affecting the continued existence of a species have been mitigated to the satisfaction of the FWS, the species is recovered and delisting can proceed.

A revised ESA should specify that recovery plans address the biological feasibility and consequences, economic efficiency, social acceptability, and operational and administrative practicality of actions aimed at the recovery of listed species. A committee of biologists (NRC 1995) has noted among its criticisms of ESA implementation that recovery plan delays produced uncertainty, thus increasing disruption of human activities. The committee suggested risk assessments, a habitat-based approach to recovery, guidelines identifying activities consistent with recovery objectives, and criteria developed by recovery working groups (NRC 1995). Biologists have recognized that public involvement is a possible key to successful recovery planning (Tear et al. 1995). An economist has suggested that recovery plans use an interdisciplinary approach and require public participation in their development (Souder 1993). The ESA should require the federal government to seek more participation from state agencies, local authorities, and private landowners, who may often be sources of extensive information on candidate and listed species as well as instrumental in protecting habitat essential for recovery.

To accomplish these tasks:

- Recovery plans should, as current law requires, contain clearly defined objectives, time frames, and criteria that lead to measurable goals for recovery, monitoring, and ultimately delisting of the species.
- Identification of habitat areas and habitat conditions essential for recovery should become a key component of the recovery planning process. The information compiled during the listing process about habitat areas and conditions necessary for the continued existence of the species —i.e., “survival habitat” (NRC 1995)—generally would form the core for essential recovery habitat. The analysis of economic and other impacts is currently required with the designation of critical habitat, and that analysis should continue as a component of recovery plans.
- The entire recovery planning process should be completed within 12 months following the listing of a species. However, there should be a process to exceed the 12-month planning period if the agency responsible for recovery believes there is inadequate information available.
- To improve the efficiency and continuity of the recovery plan process, special recovery teams should be established around a core group of experienced recovery process planners and scientists. The core team should be augmented with the appropriate species specialists from within and outside the agency responsible for each individual recovery plan initiative.
- Recovery plans should acknowledge key information needs and recommend research, inventories, monitoring, and specified timelines to fill information gaps. Plans should be periodically revised and updated.
- While recovery plans currently focus on public lands, a program to stimulate government-private partnerships should be developed and implemented where essential habitat has been identified on private lands.
- The agency responsible for recovery plans should develop a set of criteria and guidelines for establishing a species recovery prioritization process that, among other things, recognizes

actual and potential ESA program funding levels and limitations, societal values and priorities, and chances for recovery success.

- Downlisting and delisting species are important and often overlooked parts of the recovery process. Downlistings and delistings should occur as rapidly as possible after monitoring indicates recovery goals have been met or a new or updated status review determines that the original listing was based on incomplete, inadequate, or inaccurate data or analysis.
- To facilitate downlisting and delisting, recovery plans should clearly identify how the factors affecting the continued existence of the species need to be mitigated. When recovery goals have been met and these factors have been mitigated, downlistings and delistings should occur.

4) Provide Incentives to Encourage Private Landowners to Protect Habitat

Private lands play an important role in the protection and recovery of most protected species (GAO 1994). Along with certain rights, as defined in law, private land ownership carries a stewardship responsibility. When habitat essential for species conservation occurs on private lands, the agency responsible for recovery should work cooperatively with private landowners in assessing species recovery needs. This should begin by involving affected landowners in the development of recovery plans. Failure to include human dimensions in recovery planning will lead to a failure to recover species (Clark 1997).

Many private landowners are willing to protect and manage their land for the benefit of endangered species. However, the current ESA provides few incentives to do so. Public opinion supports payment of lost income to landowners prevented from developing their property because of endangered species laws (Czech and Krausman 1997). A revised ESA should encourage stewardship through incentive programs designed for various land-use and management activities. These could include easements, tax incentives, cost-sharing grants, and accelerated technical assistance.

A revised ESA, and the implementation of its principles, should recognize the following:

- SAF supports the use of Habitat Conservation Plans, and codifying into the ESA the “no surprises” policy and safe harbor agreements whereby landowners who enter into agreements with the federal government to provide habitat for species on their land at the time of the agreement are not responsible for additional responsibilities for those species. However, these provisions may not be enough (Turner and Rylander 1997).
- Species recovery is a public responsibility. If private lands are essential to species recovery, they should be identified as such and protection efforts concentrated there. However, private landowners who forego management options on their lands in order to protect habitat identified as essential should receive compensation in some form.
- It is a federal responsibility to ensure landowner compliance with the ESA. If a landowner is thought to be in violation of the Act where essential habitat has been identified, citizen suit provisions under section 11(g) of the ESA should be limited to

actions against the appropriate federal agencies that have identified the essential habitat. This should motivate federal agencies to include affected landowners in recovery plan development and to provide incentives for landowner cooperation.

Literature Cited

- Baldwin, P. 1999. The role of designation of critical habitat under the Endangered Species Act. CRS Report For Congress RS20263 [online]: <<http://www.cnie.org/nle/crsreports>>.
- Bean, M.J., and M.J. Rowland. 1997. *The Evolution of National Wildlife Law*, 3rd ed. Praeger, New York, NY. 544 pp.
- Buck, E.H., L.M. Corn, and P. Baldwin. 2002. Endangered species: difficult choices. CRS Issue Brief for Congress IB10072 [online]: <<http://www.cnie.org/nle/crsreports/biodiversity/biodv-1.pdf>>.
- Clark, T.W. 1997. *Averting Extinction: Reconstructing Endangered Species Recovery*. Yale University Press, New Haven, CT. 270 pp.
- Czech, B., and P.R. Krausman. 1997. Public opinion on species and endangered species conservation. *Endangered Species UPDATE* 14(5&6): 7-10.
- ESA's ESA Committee (Ecological Society of America Ad Hoc Committee on Endangered Species). 1996. Strengthening the use of science in achieving the goals of the Endangered Species Act. *Ecological Applications* 6(1): 1-4.
- Feldman, M.D., and M.J. Brennan. 1997. Judicial application of the Endangered Species Act and the implications for takings of protected species and private property. *Land and Water Law Review* 32(2): 509-530.
- Flather, C.H., L.A. Joyce, and C.A. Bloomgarden. 1994. *Species Endangerment Patterns in the United States*. Gen. Tech. Report RM-241, U.S. Dept. of Agriculture – Forest Service, Fort Collins, CO.
- GAO (U.S. General Accounting Office). 1994. Endangered Species Act: information on species protection on nonfederal lands. GAO/RCED-95-16 [online]:<<http://www.gao.gov/>>.
- Houck, O.A. 1993. The Endangered Species Act and its implementation by the U.S. Departments of Interior and Commerce. *University of Colorado Law Review* 64(2): 277-370.
- Moore, L., L. Michaelson, and S. Orenstein. 2000. Designation of critical habitat national workshop project, digest of the process and results. U.S. Institute for Environmental Conflict Resolution. [online]: http://www.ecr.gov/pdf/critical_habitat_rpt.pdf
- Moser, D.E., and P. Morrisette. 2001. "Critical habitat" under the Endangered Species Act: meaningless designation, or effective regulation? *Environmental Law News*, California

State Bar Environmental Law Section 10(2) [online]: < http://www.mccutchen.com/are/env/21308215_1.pdf>.

- Murphy, D.D., and B.R. Noon. 1991. Opinion – Exorcizing ambiguity from the Endangered Species Act: critical habitat as an example. *Endangered Species UPDATE* 8(12): 6.
- NRC (National Research Council). 1995. *Science and the Endangered Species Act*. Committee on Scientific Issues in the Endangered Species Act. National Academy Press, Washington, D.C. 271 pp.
- NWF (National Wildlife Federation). 1995. Involving communities in conservation: a policy position paper on the Endangered Species Act. Washington, D.C. 32 pp.
- Ruckelshaus, W.D. 1997. Foreword: The Endangered Species Act and private property. *Land and Water Law Review* 32(2): 480-483.
- SAF (Society of American Foresters). 1991. *Task Force Report on Biological Diversity in Forest Ecosystems*. Bethesda, MD.
- SAF (Society of American Foresters). 1994. *Reauthorization of the Endangered Species Act: A report to the membership of the Society of American Foresters by the SAF Task Force on Reauthorization of the Endangered Species Act*. Bethesda, MD.
- SAF (Society of American Foresters). 1996. Biological diversity in forest ecosystems: a position of the SAF. Bethesda, MD. (Expired in December, 2001; in 2002 is undergoing revision by the SAF Committee on Forest Policy.)
- Scott, J.M., T. Tear, and L.S. Mills. 1995. Socioeconomics and the recovery of endangered species: biological assessment in a political world. *Conservation Biology* 9(1): 214-216.
- SELS (Stanford Environmental Law Society). 2001. The Endangered Species Act. A Stanford Environmental Law Society Handbook. Stanford University Press, Stanford, CA. 296 pp.
- Souder, J.A. 1993. Chasing armadillos down yellow lines: economics in the Endangered Species Act. *Natural Resources Journal* 33: 1095-1139. *Sweet Home*. 1995. Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon, 115 S. Ct. 2407, 2418.
- Tear, T.H., J.M. Scott, P.H. Hayward, and B. Griffith. 1995. Recovery plans and the Endangered Species Act: Are criticisms supported by data? *Conservation Biology* 9(1): 182-195.
- Tobin, R.J. 1990. *The Expendable Future: U.S. Politics and the Protection of Biological Diversity*. Duke University Press, Durham, NC. 325 pp.
- Turner, J.F., and J.C. Rylander. 1997. Conserving endangered species on private lands. *Land and Water Law Review* 33(2): 571-622.

ABOUT THE SOCIETY

The Society of American Foresters, with about 17,000 members, is the national organization that represents all segments of the forestry profession in the United States. It includes public and private practitioners, researchers, administrators, educators, and forestry students. The Society was established in 1900 by Gifford Pinchot and six other pioneer foresters.

The mission of the Society of American Foresters is to advance the science, education, technology, and practice of forestry; to enhance the competency of its members; to establish professional excellence; and to use the knowledge, skills, and conservation ethic of the profession to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society.

The Society is the accreditation authority for professional forestry education in the United States. The Society publishes the *Journal of Forestry*; the quarterlies, *Forest Science*, *Southern Journal of Applied Forestry*, *Northern Journal of Applied Forestry*, and *Western Journal of Applied Forestry*; *The Forestry Source*, and the annual *Proceedings* of the Society of American Foresters national convention.