

Only 30: A Portrait of the Endangered Species Act as a Young Law

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On 27 December 1973, President Richard Nixon publicly reduced his energy use by flying to California on a scheduled commercial airline flight. The following day, from his home in San Clemente, Nixon signed several pieces of legislation into law. One of these—a new manpower initiative—was front-page news in the 29 December *New York Times*. The others, listed only as bullet points at the end of the article, included an authorization for a Lyndon B. Johnson memorial tree grove, a bill enabling federal insurance for fire safety equipment in nursing homes, and a wildlife protection measure known as the Endangered Species Act (ESA) of 1973.

Thirty years later and about 120 miles up the coast, a diverse group met for three days in Santa Barbara to review the consequences of that now-historic presidential signature. In the time since its enactment, the ESA has become perhaps the most divisive environmental policy issue in the country. The goal of the “ESA at Thirty: Lessons and Prospects” conference, hosted and cosponsored by the Donald Bren School of Environmental Science and Management, was to bring together prominent individuals from all sides of the ESA debate in an effort to defuse rhetoric and find common ground. Participants ranged from the person who has been credited with wielding more control over the ESA today than the government itself—Kieran Suckling, of the Center for Biological Diversity—to the Bush administration’s own man in charge, Craig Manson, assistant secretary for

fish, wildlife, and parks at the Department of the Interior. Industry leaders, activists, environmental attorneys, consultants, planners, academics, agency biologists, managers, and elected officials all were held in close quarters by an agenda that spilled across breakfast, lunch, and dinner.

Much was said and, despite some sharp differences, the parties expressed considerable agreement both on the nature of the problems the ESA now faces and on the direction in which solutions must lie. Defenders of the act agreed that there is a pressing need to address some of its shortcomings and unintended consequences; ESA critics acknowledged both the validity of its purpose and the need for some government regulatory mechanism for protecting species. In the end, the success of the conference may have been simply in bringing greater clarity and legitimacy to a question that seemed present throughout: Can the seemingly contradictory imperatives of increased conservation effectiveness and reduced economic burden be reconciled in some widely acceptable kind of ESA reform?

Imperfect, yet ahead of its time

The ESA was once, to the extent that it was noticed at all, a very popular law. Its prodigious powers first gained widespread public attention when the Supreme Court ruled in favor of the snail darter in 1978, halting construction of the Tennessee Valley Authority’s Tellico Dam. Ever since—but particularly in the last 10 years—dissatisfaction

with the act and its enforcement has grown, among both conservationists and regulated groups. Critics claim the ESA is taxonomically biased, insufficiently funded, and overwhelmed by litigation. It fails to provide adequate incentives or enforcement, and sometimes punishes good deeds. It is subject to conflicting political, legal, and regulatory mandates and is completely intractable as a conservation mechanism on private land. It impedes economic development and imposes costs and obligations unfairly. It maintains but seldom recovers species, and it does nothing to prevent species from becoming threatened in the first place.

By legal standards, the ESA is still young, and its implications and imperfections are still being revealed and addressed. Underlying some of the recent contentiousness surrounding the act is an ongoing coming to terms with its most original and enduring ideas, a process still unfolding in a world that has changed greatly since 1973. The ESA drew upon a body of knowledge still new to science, and values just finding widespread societal articulation, to boldly address the phenomenon of species extinction not as a peripheral or aesthetic concern, but as a problem of deep biological and moral significance. Accordingly, it introduced a new and fundamental prohibition into the conduct of human affairs: to not jeopardize the continued existence of another species. It offered comprehensive legal protections to species—and even subspecies—found to have become perilously rare, and it specified that only



Habitat conservation planning for the California gnatcatcher has created islands of open space in a sea of urban development. Reserve-based approaches may not provide adequate long-term protections to imperiled species, given the uncertainties of climate change. Photographs: US Fish and Wildlife Service (left) and Jim Greaves (right).

biological criteria should be used to decide when and where these protections should apply. What seems most remarkable today is that the ESA's unqualified affirmation of the value of species survival, over and above monetary considerations, was approved by the US Senate 92 to 0 and received only 12 dissenting votes in the House.

The basic notion that limits must be set on human activities to preserve the biological world has resonated strongly with the American public and has seldom been seriously challenged. "Save the humans" rhetoric notwithstanding, the argument that such limits should not exist is seldom raised in public debate. Contentiousness emerges from all the particulars that the imposition of limits entails, from issues of definition and interpretation, of jurisdiction and enforcement, of efficacy, and perhaps above all, of fairness. Those yes-voters in the Senate, many of them at least, did not foresee what was coming.

The importance of being listed

Without a doubt, the ESA has done some good. The bald eagle and peregrine falcon are well-known success stories, and their value should not be overlooked. But of over 1300 species that have been listed since 1974, only 18 have been delisted on the grounds of recovery. Most

of these were exceptions to the general rule of species endangerment, in that the principal threat they faced was not habitat loss. With numbers like that, it's easy to make the ESA look bad.

Delisting, however, is not the only, and perhaps not the best, measure of success. Although the law does point to species recovery, it often has little power to reverse the factors that caused a species' decline. Few delistings may indeed point to the inadequacy of recovery planning efforts; environmentalists have long argued that greater funding for recovery programs is needed. Formal recovery plans developed under the ESA carry no added regulatory authority, however, and in many cases are never developed. The act's real strength lies less in its ability to promote species recovery than to prevent species extinction. In this regard it has, at least arguably, been effective. Relatively few listed species have gone extinct, and more are stable or increasing than not. By these and other measures, being on the list is good for species in trouble. But as several speakers pointed out, many listed species will probably always remain dependent on the protections that the ESA provides.

The other controversy is over how well the ESA is working functionally, as an instrument of conservation policy

and as a law affecting land use on public and private lands. Here there is greater agreement: The ESA is struggling. Many of its problems are ultimately the result of external pressures not foreseen at its inception: a turbulent and transforming global economy, growing ideological divisions and resource conflicts, a shrinking biological world, and a mushrooming vortex of species endangerment. Under this onslaught, the mechanisms written into the ESA to protect species are breaking down, beginning with the listing process itself.

It didn't take long after the ESA was enacted for a lengthy waiting list of candidate species to form. Since the late 1970s, the US Fish and Wildlife Service (FWS) has tried by various means to reduce this backlog, or to carry on despite it, though always under the basic constraint of inadequate funding to get the job done. Progress on listing actions has been uneven over time, sometimes sped up by lawsuits and sometimes slowed by policy shifts and budget cuts. Under the current administration, listing has proceeded at the slowest pace since the early 1980s. But over the entire history of the ESA, listings have averaged just over 40 species per year, and the development of recovery plans has not even kept up with listing. At that pace, critics point out, it would take over 150 years just to list all of the

over 8000 “G1” and “G2” US species that NatureServe, a nonprofit conservation organization (see www.natureserve.org), currently recognizes as imperiled.

Political, budgetary, and legal pressures also greatly influence how the act’s protective mechanisms are applied. The strongest protections the ESA offers are its prohibitions on federal actions that may jeopardize a species or its habitat. It is these federal agency directives, contained in section 7 of the act, that stopped

construction of Tellico Dam and slowed logging of national forests in the Pacific Northwest. Section 7 is implemented through a process of consultation between the FWS and the agency proposing to fund or carry out an action that may affect listed species. Through this process, agency biologists determine whether and to what degree a species or habitat may be jeopardized by a particular project (such as the construction of a new highway) or program (such as

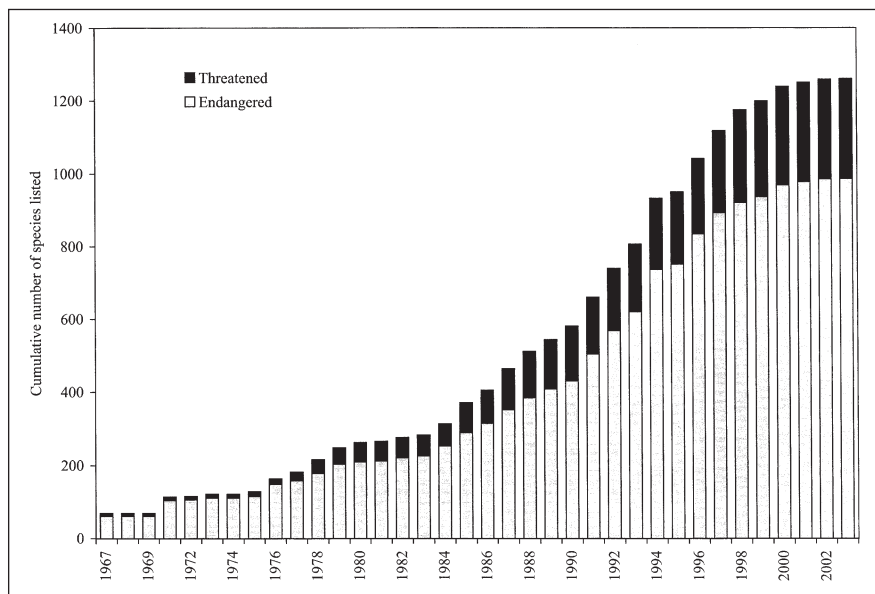
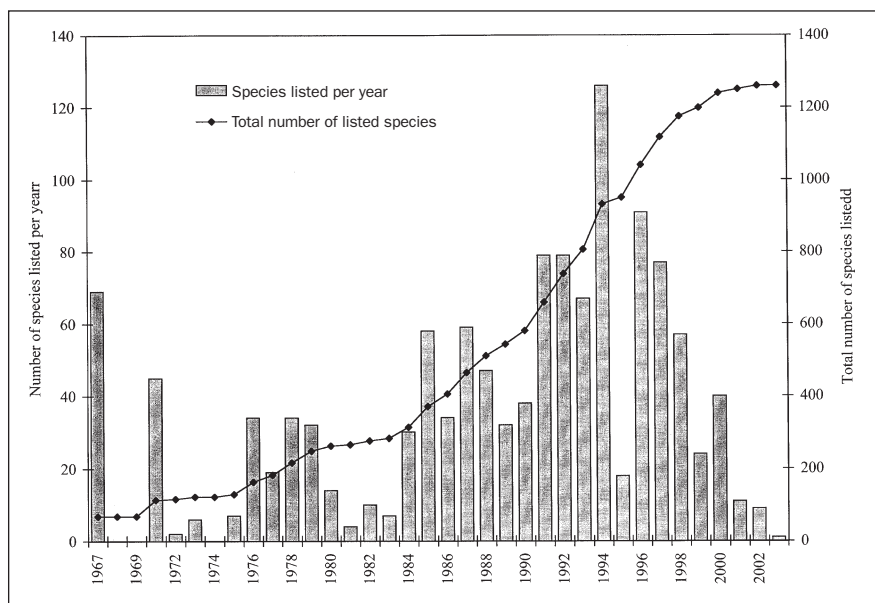
the management of reservoir releases by the Bureau of Reclamation or the issuance of grazing leases by the Bureau of Land Management).

One of the ESA’s unarguable achievements is to have institutionalized conservation considerations in federal agencies. Programs and policies are routinely developed with a view toward minimizing section 7 conflicts, and this constraint alone produces real—if hard to measure—conservation benefits. Most proposed actions are in fact approved by the FWS with little or no modification required. But even in these cases, for agencies and private parties awaiting approval, the time required for formal consultation can be frustrating and sometimes costly. And then there are the few cases in which a jeopardy finding blocks some action of significant economic or social magnitude—the cases that make headlines.

Determinations that a project may have negative impacts are issued in formal “biological opinions,” in which the FWS presents the scientific case for its decision. Often it’s a tough call: How will a rare species, about which scientific knowledge may be fairly limited, respond to some new form of disturbance? The science may seem less certain than the economic impacts, particularly to non-scientists affected by the ruling. In all of these respects, it should be emphasized, the law is working more or less as intended: Consultation is supposed to halt or at least slow actions that, based on the best information available, would put a species at risk of extinction. The difficulty is that the pace of consultation is slower, the scope is greater, and the stakes are higher than ever before.

Pressure and prioritization

Not surprisingly, challenges to FWS decisions on whether to list a species, and to the findings and regulatory decisions that emerge from section 7 consultation, are the most common of the more than 450 legal cases that have been filed under the ESA since 1974. A growing trend in recent years has been lawsuits challenging the legitimacy of the science upon which the FWS based a particular decision. All of the litigation—



Over 1200 plant and animal species are currently listed as threatened or endangered. Although the number of species in need of ESA protections continues to grow, the number of species listed per year has declined steadily since 1994. Graphs courtesy of Leona K. Svancara, University of Idaho.



In Wisconsin, the Karner blue butterfly is the subject of the first statewide habitat conservation plan. Over 25 partners, including timber and development interests and conservation organizations, participate in this large, habitat-based conservation effort.

Photograph: John and Karen Hollingsworth, US Fish and Wildlife Service.

both from environmental advocates and from the regulated community—has greatly reduced the ability of the FWS to set its own priorities regarding ESA implementation. Whether this is a good thing or not depends on whom you ask. For advocates like Suckling, lawsuits are the only way of forcing the FWS to do the things the law tells it to do, such as designate critical habitat for listed species (see box 1). But responding to lawsuits and court orders also makes more work for an agency already struggling to fulfill its other responsibilities.

For the FWS, the one way of reducing its political and legal vulnerability has been to adopt a fairly rigid approach to implementation. This defensive posture has helped the agency maintain a basic level of integrity in its application of the law, but it has not always helped in achieving the goals of species protection. An agency afraid to change its mind cannot easily admit to past mistakes, incorporate new information, or practice adaptive management. The risk then is that conservation becomes reduced to mere compliance with a bureaucratic process. Several speakers at the conference described a kind of paralysis that sets in after a species is listed. In recovery planning, for example, it may be difficult to alter or move beyond an initial

Box 1. The critical habitat controversy

If the Endangered Species Act (ESA) has become a battleground, the front line is the issue of critical habitat. According to the law, at the time of listing, the US Fish and Wildlife Service (FWS) or the National Marine Fisheries Service must designate specific areas of habitat considered essential for species survival and recovery—unless the agency determines that such designation would not benefit the species. Whether critical habitat does in fact benefit listed species is an open question. Though commonly misunderstood as a kind of sanctuary or reserve, critical habitat is a legal distinction that applies only to federal agency actions under section 7 of the ESA. Its sole direct effect is to add, to the requirement that federal actions not cause jeopardy to the species, the further requirement that actions not adversely modify designated critical habitat areas such that harm to the species may result.

The FWS has long held that, as a protective mechanism, critical habitat is most often redundant: Any action that might be prevented on the grounds of “adverse modification” of critical habitat is most likely one that would have been blocked anyway, on the grounds of causing jeopardy. Thus, by the government’s own interpretation of the law, critical habitat provisions are virtually meaningless. Accordingly, since the mid-1990s, the FWS has ruled that designation was not needed in the vast majority of cases it has reviewed.

Environmentalists, on the other hand, maintain that critical habitat adds vital protections and that exceptions to the designation requirement should be rare. Groups such as the Center for Biological Diversity (CBD) have successfully sued the FWS to reexamine a large number of cases in which designation had been ruled “not prudent” at the time of listing. The CBD’s Kieran Suckling told the “ESA at Thirty” conference that designation is indeed critical, to protect areas that are needed for recovery even if a species is temporarily absent. Suckling also noted that federal agencies tend to be more cautious, and require stronger mitigation measures for potentially damaging activities, when critical habitat is in place.

A significant complication is that critical habitat designation—unlike listing—requires an analysis of economic impacts. These have become the object of a new round of litigation by the regulated community, in response to recent designations forced by environmental groups. The question of how to analyze the economic impacts of designation is a thorny one. The FWS’s position that critical habitat offers little additional protection would seem to suggest that designation, on its own, would have little added economic impact. The courts have rejected this position, however, and in one highly influential ruling called for analysis of impacts that may arise “coextensively” with other factors—namely, listing. Thus the critical habitat controversy has spilled over into examination of the economic costs and benefits of listing itself—something the ESA seemed deliberately designed to avoid.

Former Secretary of the Interior Bruce Babbitt told conference attendees that critical habitat is the least important provision of the ESA. “You could strike critical habitat from the statute tomorrow and no one would miss it,” Babbitt said. “The Fish and Wildlife Service has been brought to its knees carrying out court-ordered mapping exercises and impossible economic analyses.” Suckling countered with a recent CBD analysis of FWS data showing that listed species with critical habitat are more than twice as likely as those without it to be improving. He and other conservation advocates stated that critical habitat was their line in the sand, which they would not surrender without a fight.

set of recommendations once these are formally established.

In the meantime, listing proceeds as a kind of environmental triage in extreme slow motion, with few species being allowed to proceed from the waiting room of candidacy (where some have stood for over a decade) to the realm where they receive basic protections—

but where meaningful recovery action may or may not be taken on their behalf. In most cases, the delay means a more difficult and costly recovery; in some, the species may be doomed by the time it makes it onto the list. (Extinctions of listed species, in turn, are cited as evidence that costly recovery programs brought on by listing fail in their objec-

Box 2. The language of compromise

Since its inception in 1973, legislative and executive tinkering with the Endangered Species Act (ESA) has produced a series of new rules and programs intended to ease regulatory burdens and promote partnership conservation efforts between the federal government, states, and private parties.

Habitat Conservation Plans (HCPs) were the first significant attempt to extend ESA authority to establish long-term commitments for habitat management. They have become the act's primary means of mediating conflicts between listed species and timber harvest or land development projects. HCPs rest on the concept of mitigation, in which losses (such as habitat destroyed by development) must be offset by gains (such as an equal or greater area of habitat improved or permanently protected). The area covered by an HCP may be a small—individually owned parcels of a few acres are the most common—or large, as in Wisconsin's statewide Karner Blue Butterfly HCP. Over 430 HCPs exist nationwide, covering an area of 40 million acres. Advocates of a strong ESA have criticized the HCP approach as far too conciliatory to development interests.

Safe Harbor Agreements may exist as part of a multiparty HCP or as independent contracts between the US Fish and Wildlife Service (FWS) and private landowners. They differ from HCPs in that their purpose is to encourage proactive conservation management on private lands by removing the threat of additional future regulation or restrictions, should listed species appear or increase in numbers. *Candidate Conservation Agreements with Assurances*, a more recent innovation, are similar in that they protect property owners who manage their land in a manner intended to benefit candidate species from additional restrictions, should the species eventually be listed.

HCPs were made possible by a 1982 amendment allowing the FWS to issue *incidental take permits* to landowners. These allow projects in which listed species may be harmed to proceed, free of the restrictions and penalties present under section 9 of the ESA, given the promise of adequate mitigation. Even broader exemptions to ESA regulation were granted under the Clinton administration's controversial "no surprises" rule, which guarantees the sufficiency of already agreed-to mitigation and management under any future circumstances, such as the arrival on the scene of some as yet unlisted species.

Whether all of these tools provide a means of effective, partnership-based conservation on private lands, or just a means of getting around ESA restrictions, is a matter of debate. Increasingly, they are being combined with a number of new *stewardship incentive programs* to fund voluntary conservation efforts for listed and yet-to-be-listed species.

tives.) Species with well-funded recovery programs do in fact tend to recover. But a few species receive the lion's share of all recovery funding, while a majority share the small percentage that remains.

Thus the broad scope and comprehensive protections of the ESA are reduced in application by a series of prioritization decisions that spell out which listing and recovery actions are to be applied to which species. Such prioritization is necessitated, ultimately, by constraints on agency funding. But if funding constraints are intended to result in more efficient administration of the law, their effects may be just the opposite. Forced to juggle programs and priorities, the FWS remains all the more

susceptible to outside pressures. Listing species based on proximity to extinction, and then pushing through the often slow, costly, and litigation-driven process of critical habitat designation and recovery planning, may not be the most efficient way to conserve biodiversity. This is, however, the groove in which ESA implementation now is stuck.

Species conservation and the working landscape

Contentiousness is the greatest where need is the greatest—where species survival or human livelihoods are at stake. Not surprisingly, the sharpest conflicts occur in settings where the ESA is applied to protect species found on private lands.

Nonetheless, with habitat loss being the primary threat for most species, it is to private land that conservation efforts must now turn. Over 70 percent of the country is privately controlled, and 80 percent of listed species use these lands. So do people, of course, and, unfortunately, many of them—some with good reason—view the ESA and the FWS with fear and mistrust.

The challenge of overcoming that mistrust, and of creating new positive incentives for conservation on both private and "multiple use" public lands—the so-called "working landscape"—was one of the central topics at the "ESA at Thirty" conference. Not all species, of course, can benefit from the enhancement of habitat that may still be heavily modified by human use. For such species in particular, reserves and protective prohibitions are essential, but they have their limits: Reserves are expensive, inflexible, and often too small. Prohibitions may stave off extinction, yet they do little to advance recovery. Landscape management that seeks to integrate conservation and economic interests represents a third way, one that recognizes and builds upon values with a broader public currency than biodiversity protection.

Speakers discussed obstacles to such an approach and some promising examples of new directions, within and beyond the sphere of the existing ESA. At least three major obstacles exist to greater voluntary participation by landowners in habitat conservation and restoration efforts. The first is section 9 of the act, which forbids the killing of listed species either directly or through modification of habitat. While such prohibitions are clearly important, they present a problem for landowners. The fact that a listed species can impede future property uses or development, and can even decrease property value, creates a strong disincentive for doing anything that might attract one. As Idaho Governor Dirk Kempthorne noted in his keynote address, land for sale in some western states may even be advertised as endangered-species free: "No birds equals no problems."

Since the 1980s, amendments to the ESA have established a series of new

programs intended to remove or negate the conservation disincentives of section 9 (see box 2). The effectiveness of these has been limited, however, by the second major obstacle, the FWS itself. Completing a “safe harbor” agreement or habitat conservation plan is commonly described as a long, costly, and deeply frustrating endeavor. A habitat restoration project that may result in some incidental take of the species whose habitat is being improved can be delayed for months or years until the necessary sequence of permits and consultations is completed. Such a process is comprehensible only to the bureaucrats who administer it; for everyone else, it only heightens the sense of mistrust and risk about the whole endeavor.

The third obstacle is a general lack of incentives to make conservation improvements. All the FWS can offer is removal of the threats of prosecution and additional future restrictions on land use. These actions, though necessary, may not be sufficient, for example, to persuade ranchers to reduce grazing and restore native grasses on portions of their land. Recently the FWS established some new mechanisms for providing financial incentives to private landowners, including state-administered habitat conservation grants. But significant funding for these programs has been slow to clear congressional hurdles, and to some extent it has come at the expense of funding for listing and recovery planning.

Taken as a whole, the Clinton-era reforms aimed at reducing ESA-imposed burdens on private parties, and the Bush-era programs providing incentives for habitat protection in exchange for reduced regulation, have had a mixed record. Viewed most generously, these programs may be an important step toward a more integrated and affirmative approach to biodiversity protection, one that draws on partnerships between the federal government, states, tribes, and private parties. Many environmentalists, however, say the new programs only sap key ESA protections of both legal authority and funding, with little conservation benefit in return. From a private-sector perspective, more options



Sand mining and development threatened the last remaining habitat of the Antioch Dunes evening primrose, pictured above. Small reintroduced populations now exist in several locations, including the Antioch Dunes National Wildlife Refuge, the first such refuge established for an endangered insect (Lange’s metalmark butterfly) and two endangered plants (the evening primrose and the Contra Costa wallflower).

Photograph: Ivette Loreda, US Fish and Wildlife Service.



Critical habitat for the southwestern willow flycatcher was designated in 1995 and has helped environmental groups argue successfully for restrictions on grazing in the riparian habitats of Arizona and New Mexico.

After a lawsuit by the National Association of Home Builders, the original designation was set aside by court order in 2001. Redesignation is now under way. Photograph:

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are available than ever before—but only for those with the patience and fortitude to choose among a bewildering array of programs, complete a lengthy application process, and compete with other applicants for limited funding.

What all of this fails to achieve is what many at the conference said is needed most of all: a restored sense of trust and cooperation between agencies, regulated groups, and environmental interests. One prerequisite for restoring trust is clarity. Often what people want most of all is simply a clear understanding of what the rules are and what is expected of them. In addition, as several speakers emphasized, regulated groups want some assurance that they are doing more than simply complying with regulations, that real conservation benefits are being realized. “The private sector is here to help,” said Troy Bredenkamp of the American Farm Bureau Federation. “We understand the importance of biodiversity, and we don’t want to see species go extinct. But we want the act to work.”

The challenge is in striking an appropriate balance between the need for procedural clarity, agency flexibility, and positive incentives, on the one hand, and the need for regulatory authority and recognition of the inherently uncertain nature of conservation science, on the other. The conference ended with what seemed to be broad agreement on a number of improvements that could help restore balance and make the ESA more effective. The trend toward incentive-driven, habitat-based conservation must continue, but it must go several steps beyond present levels. Programs need to be coordinated, simplified, and streamlined. Stakeholder participation in ESA decisionmaking should be increased, and the science underlying decisions should be more transparent.

There was agreement also that states must take on a greater role in conserving habitat, since it is at state and local levels that most of the land-use decisions affecting habitat are made. The



Safe harbor provisions of the Gulf Coast prairies of Texas habitat conservation plan are helping to protect species such as the endangered Attwater's prairie chicken, pictured above, and the Houston toad. Photograph: Gary Halvorsen, US Fish and Wildlife Service.

question of how more authority could be delegated to states under different sections of the ESA will be an ongoing subject of debate. A few innovative programs

exist that may provide a model for greater state involvement. Idaho's Office of Species Conservation, for example, coordinates federal and state agencies on all ESA-related issues in the state and helps facilitate and implement conservation agreements involving private parties.

Whether all this can be achieved within the framework of the ESA is a question that remains unanswered. The need for widespread participation in habitat conservation may point to the need for a parallel initiative, one geared toward preventing species from becoming threatened rather than halting their slide toward extinction. Such an initiative may not be visible on the present political horizon, but it may be where the broadest current of ESA reform is headed.

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