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The Endangered Species Act

Who's Saving What?

— ◆ —

RANDY T. SIMMONS

Environmental policy in general and the Endangered Species Act (ESA) in particular are far removed from our roots in limited government, individual freedom, and personal responsibility. At their core are increasing coercion, expanding government, and shifting responsibility from individuals to society while shifting social costs to individuals. As the government takes charge, however, politicians, bureaucrats, and judges do not necessarily create appropriate laws and regulations. The objectives of some laws and regulations even defy common sense—save every species, zero discharge, zero risk, and natural regulation, to name but a few. The actual content of policy is animated more by emotions than by analysis as Congress makes moral statements rather than establishing functional policies and processes. Major environmental policies such as those that purportedly protect endangered species are implemented without regard to costs or results.

The Endangered Species Act is the federal law dedicated to preserving biological resources. It operates by assigning infinite value to every species and declaring that each must be saved. In 1978, in the Tellico Dam decision (*TVA v. Hill*, 437 U.S. 187), the U.S. Supreme Court declared that the ESA defines “the value of endangered species as incalculable,” and requires that species losses must be stopped “whatever the cost” (184).

One of the ESA’s most eloquent supporters, Harvard biologist E. O. Wilson (1992), declares that “every scrap of biological diversity is priceless, to be learned and cherished, and never to be surrendered without a struggle” (32). Wilson’s statement

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may be viewed as a modern version of Aldo Leopold's claim that "if the [living world], in the course of eons has built something we like but do not understand, then who but a fool would discard seemingly useless parts? To keep every cog in the wheel is the first precaution of intelligent tinkering" (1949, 177).

Such high-minded claims may be emotionally satisfying, but by themselves they provide little guide to policy. The question remains: What to do next? As biologist Garrett Hardin put it: "*And then what?* As act becomes policy, as event gives way to cycle of events, what are the consequences? Good intentions are not enough; the mechanism of our policy must produce good results in this time tied world where consequences become causes" (1982, 5). If policy and court decisions declare species to have infinite value, then what? The ESA was created with the intention of saving species, but what have been the results? Are species being preserved? Are they recovering from threats? What are the costs? Who bears them?

As soon as we move from emotive statements about the value of protecting species, it becomes clear that saving every cog or species is costly. It is also clear that the ESA does not allow for reasonable comparisons of costs and benefits. In fact, the act expressly forbids that the secretary of the interior, the administrator charged with implementing it, consider economic effects when he acts to protect a species. Those effects can range from mild irritations to loss of almost all economic value of the land in question. For example, the ESA empowers the salt marsh mouse to hold back bulldozers and the inch-long Delta smelt to reduce freshwater pumping for cities and farms.

Congress does not appropriate enough funds to save every cog. Although state and federal spending on endangered species has averaged \$529 billion per year during the 1990s (House Committee on Resources 1997), the Fish and Wildlife Service is so short of funds that it is unable to write recovery plans for more than 400 listed species, to identify critical habitat for more than 750 listed species, to list nearly 180 species that meet the legal definitions of "threatened" or "endangered," or to adequately review nearly 4,000 species that may be declining (O'Toole 1996, 32).

Despite high-minded intentions, the ESA does not achieve its goals. Moreover, it puts obstacles in the way of public and private preservation efforts and creates disincentives for landowners to protect species on their own property. The ESA is, in fact, dishonest legislation. Species are listed but not recovered, and the costs of carrying out the act's public purposes are disproportionately borne by private landowners.

Does the ESA Work?

The ESA authorizes the Fish and Wildlife Service (FWS) to create "critical habitat designations" and requires the development of recovery plans for species on both the threatened and the endangered lists. The purpose is to identify species in trouble, protect them initially, and develop plans and programs to restore the designated populations to viable levels. Although recovery plans have been designated for 653 of the

1,138 U.S. species listed as threatened or endangered, critical habitat has been designated for just 124 (U.S. Fish and Wildlife Service [USFWS] 1997).

A 1994 Fish and Wildlife Service report identified twenty species as having been delisted, eight because they had become extinct and eight others because the original data used to justify their listing were in error (USFWS 1994b, 41–42). According to the report, only four species had been removed from the endangered species list because their populations had “recovered” (41–42). The report also identified the gray whale, the brown pelican, and the American alligator as delisted but remaining in a special listing category (41).

However, the Endangered Species Act helped none of these species. The first four species were delisted because more were discovered than had originally been thought to exist. The alligator is also a case of data error. Officials of the Florida Fresh Water Fish and Game Commission believe that the alligator was originally listed because its population dynamics were misunderstood. An article in the National Wildlife Federation’s magazine claimed that the “familiar and gratifying” recovery story about the alligator was “mostly wrong” (Lewis, 1987). In addition, alligator farming has greatly increased alligator numbers in the wild by reducing the incentives for poaching. The principal cause of the pelican’s decline was reproductive failure due to the pesticide DDT, and its recovery had far more to do with banning DDT than with the Endangered Species Act. (DDT was banned in 1972, and the ESA was passed in 1973.) When the gray whale was listed, its numbers were growing, and it was delisted as its numbers continued to grow. Since the 1994 FWS report, the Arctic peregrine falcon has also been delisted, but, like the brown pelican, the peregrine recovered in large part because of the ban on DDT. The remoteness of its nesting habitat in northern Alaska is also considered a major contributing factor (Competitive Enterprise Institute 1995, 1–3; Gordon, Lacy, and Streeter 1997). Thus, the few species listed under the ESA that are now considered recovered are not ESA success stories at all, even though Secretary of the Interior Bruce Babbitt called the act “the most innovative, wide-reaching and successful environmental law that has been passed in the past quarter century” (1994, 55).

Another reason the ESA does not live up to its publicity is that, besides keeping species from going extinct, its purpose is to return them to viability. The ESA successfully *lists* species, but it brings few back from the edge of extinction. Over the past decade an average of 38 species have been added to the list each year, but of all listed species only 10 percent are improving, and the backlog of species waiting to be listed keeps growing (Reid 1994, 5–6).

Data Quality

Nothing in the ESA regulates the quality of the data admissible for the purpose of listing species. Data are not subjected to a scientific review process, they are not field-

checked, and the Secretary of the Interior is not required to identify any gaps in the data that have been collected. One result is that species are sometimes listed needlessly (Gordon, Lacy, and Streeter 1997). Eight of the nineteen species that have been removed from the Endangered Species List are in this category. Two examples are the Mexican duck and the tuamoc globeberry, species that were listed and then delisted once new data became available.

During the 1970s the Mexican duck was listed as endangered, but it was later removed upon discovery that there is no such thing as a “Mexican” duck. What biologists initially thought was a distinct species turned out to be a blue-eyed version of a mallard that was not genetically different from regular mallards (USFWS 1978).

In 1986 the tuamoc globeberry was listed, and plans were implemented to save it from extinction. From 1989 to 1991, the Bureau of Land Management, the Department of Defense, the Army Corps of Engineers, and the Bureau of Reclamation spent \$1.5 million to protect the globeberry. But the FWS eventually discovered that the tuamoc globeberry existed in far greater numbers and in more places than initially thought, so it was delisted.

One might argue that the tuamoc globeberry and the Mexican duck are successes of the act, not failures. After all, new data were allowed into consideration and, based on those data, the listing decision was reversed. Moreover, spending a few million dollars on a mistake seems virtually harmless when viewed amid the bigger picture of government spending and pork-barrel politics. Of course, a process that allows wrong decisions to be reversed is good, but in addition to the possibility of reversal, a fair policy would require that initial listing decisions rest on sound, relatively complete data. Such a requirement is especially important given the disruptive effects the resulting decisions often have on people’s lives.

Costs of the Endangered Species Act

Although court decisions regarding endangered-species protection use terms such as “incalculable,” “the highest of priorities,” and “whatever the cost,” Congress does not appropriate funds as if species had incalculable value or as if species protection were the highest of priorities. Claims about expenditures on endangered-species protection vary by as much as a factor of ten, but the actual government expenditures appear to be quite modest. The Environmental Defense Fund’s fact sheet on endangered species claims, “The core budget of the U.S. Fish and Wildlife Service’s endangered species program is \$58 million, or about equal to what residents of the metropolitan Washington, D.C., area spend each year on pizza delivery from just one major chain” (Environmental Defense Fund 1998). The House of Representatives Committee on Resources claims that total state and federal spending from 1991 to 1997 was \$3.706 billion, or an average of \$529 million per year (House Committee on Resources 1997, 23). Even this amount does not approach infinity; nor does it suggest that Congress places “the highest of priorities” on species preservation.

The relatively small amount of funding appropriated for endangered-species programs suggests that Congress is unwilling to carry out the policy implications of legislation the Court interprets to mean that Congress considers the worth of endangered species to be incalculable. Others are bolder than Congress in identifying the policy implications. For example, Dr. Reed Noss (1992, 1994), editor of the prestigious scientific journal *Conservation Biology*, argues that huge amounts of land must be set aside. For a species to maintain genetic variation sufficient to cope with environmental uncertainty and to guard against nature's catastrophes, an interbreeding population of at least 1,500 to 2,000 individuals must be maintained. Therefore, Noss claims, 484 million acres are required to support a minimum viable population of 2,000 grizzlies, 400 million acres for 2,000 wolverines, and 200 million acres for 2,000 wolves. Other estimates are somewhat smaller. Bader (1992), for instance, estimated that a minimum of 32 million acres is required to support a population of 2,000 grizzly bears. Even this lower estimate represents an area equal to one-third of Montana.

As of March 31, 1997, there were 1,082 species listed as threatened or endangered (USFWS 1997). In addition, more than 3,000 others are waiting to be listed (Carroll et al. 1996), and a few thousand more are waiting to be "discovered." These estimates may be low: others claim that more than 9,000 plants and animals are biologically threatened in the United States (Halverson 1995). Saving all the habitat required to protect minimum viable populations of all these endangered species will require depopulating large areas of the United States, hardly a credible policy.

An alternative to depopulating large sections of the country was suggested by ecologist Paul Ehrlich and biologist E. O. Wilson. In an article in *Science*, they claimed that biodiversity is in such danger that the United States must "cease developing any more relatively undeveloped land" (Ehrlich and Wilson 1991, 758). Only then, they argue, can the intentions of the ESA be met.

A less costly plan would be simply to pay the costs of listing, recovering, and delisting species currently listed or proposed for listing. But estimates of those costs range from \$7.63 billion to \$13.56 billion (National Wilderness Institute 1994, 38–39), and Congress does not come close to providing funding at those levels. The National Wilderness Institute reviewed the costs estimated by 306 recovery plans for 388 of the 853 species then listed under the ESA and found the total cost would be \$884,164,000 in 1994 dollars (Gordon and Streeter 1994, 1). The National Marine Fisheries Service's proposed recovery plan for the Snake River salmon makes cost projections ranging from \$166 million to \$338 million per year over the seven-year life of the plan (House Committee on Resources 1997, 18).

Other costs, however, are often not immediately clear to analysts. Half of the economic activity around Bruneau, Idaho, for example, was threatened when the Fish and Wildlife Service began cutting off water rights to fifty-nine farms and ranches in order to protect the Bruneau Hot Springs snail.¹ In Oregon and Washington, millions of acres of productive timberlands are off-limits for timber harvest, as are similar amounts

of loblolly pine stands on private and public lands in the South. Western rangelands are subject to use prohibitions because of the desert tortoise and numerous desert plant species, and the mining of phosphates and other minerals has been banned in much of northern Florida. Property owners in the Texas hill country face criminal prosecution if they clear brush along their fencerows. Water rights of the Ute and Navajo tribes are being expropriated by the federal government to protect endangered species. Highways are being rerouted and airport expansions prohibited across the country. The kangaroo rat regulations in Riverside County, California, make the rat effectively the largest landowner in the county. Current plans to save the Sacramento Delta smelt are likely to cost billions. According to Ike Sugg, the executive director of the Exotic Wildlife Association, “conservative estimates of the act’s costs are in the tens of billions of dollars” (1993, A15).

Proponents claim, however, that the ESA causes very few economic disruptions, and they point to what are called “agency consultations” as evidence. Any federal agency proposing an activity that may affect an endangered species must consult with the Fish and Wildlife Service or with the National Marine Fisheries Service to ensure that the activity produces no more than minimal harm to protected species. After a biological assessment determines that the project is likely to adversely affect the species or its critical habitat, the Fish and Wildlife Service must issue a biological opinion, known as a jeopardy opinion, that officially declares whether the action is likely to jeopardize the continued existence of a listed species or to result in the destruction or adverse modification of its critical habitat. If the Fish and Wildlife Service or the National Marine Fisheries Service finds that the proposed action will jeopardize members of an endangered species or adversely modify an endangered species’ critical habitat, the agency issues a jeopardy opinion that suggests reasonable and prudent alternative actions.

A 1992 World Wildlife Fund (WWF) analysis of 71,560 federal agency consultations from 1987 to 1991, for example, found only 18 projects that were stopped because they would endanger a species. Many of the agency consultations, though, were simply telephone calls to the FWS requesting a list of endangered species. Of the 2,000 contacts that became formal consultations, jeopardy opinions were issued for 350. Eighteen activities were blocked, and 35 were left unresolved. The WWF study uses these data to show that, depending on the outcomes of the unresolved cases, from 0.9 to 2.65 percent of the 2,000 formal consultations and from 4.1 to 15.1 percent of the jeopardy opinions stopped proposed actions.

Looking carefully at the WWF numbers, however, one reaches different conclusions. Of the 350 jeopardy opinions, 169 were separate opinions for a single EPA pesticide program. If those 169 opinions are counted as one, the percentage of actions blocked rises to 24 percent. The WWF study’s results also change dramatically if one

1. A federal judge threw out the listing of the snail under the ESA, citing inadequate data, and stopped the FWS from reducing the flows of water.

includes the 44 timber sales adversely affected by the spotted-owl decisions (National Wilderness Institute 1994, 18–19).

The WWF analysis is restricted to actions between government agencies and does not consider how many actions on private lands are blocked by the ESA. Private land-owners who wish to work around an endangered species on their land can face huge costs as projects are dropped or delayed, some indefinitely.

Another California illustration of the ESA's hidden costs is provided by the pocket mouse, a rodent rediscovered in 1993 after not having been seen since 1971. The mice were found during an environmental survey for a proposed resort, to be built on the Headlands, 121 acres overlooking Dana Point Harbor. The survey found thirty-nine mice on four acres of the site. The Fish and Wildlife Service moved quickly to place the mouse on the emergency endangered-species list, thereby delaying construction of the four-hundred-room hotel complex and 394 homes. The *Los Angeles Times* quoted a spokesman for the local chapter of the Audubon Society who welcomed the listing because, even though it might not stop the project, it would cause delay (Haldane and Hall 1994, B1).

Projects such as the Dana Point project are being delayed all across the country by the ESA. The Fish and Wildlife Service's *Report to Congress on the Endangered and Threatened Species Recovery Program* (1993), which claimed to be the "first comprehensive accounting" of conservation and recovery efforts since 1967, estimated that "approximately 25% of all listed species have conflicts with development projects or other forms of economic activity." A content analysis by the National Wilderness Institute (1994, 39) of 306 recovery plans shows the expected conflicts detailed in table 1. With more than 3,000 species waiting to be reviewed and then possibly listed, the amount of economic conflict will expand exponentially.

Private versus Public Rights

The agency consultations mentioned earlier are required by Section 7 of the ESA. That section requires federal agencies to ensure that their actions, broadly defined as activities authorized, funded, or carried out by an agency, including issuing permits and licenses, do not "jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat." Building dams, roads, canals, highways, or housing; granting grazing permits or hunting licenses; and allowing access to federal lands are all activities of the federal government that might alter habitat. If the agency determines that its action would jeopardize a species, it must either recommend reasonable and prudent alternatives that would avoid harming the species (*U.S. Code*, vol. 16, sec. 1536) or apply to the Endangered Species Committee for an exemption from the requirements of the act. This committee, known popularly as the "God Squad," consists of seven political appointees. It was created by Congress in 1978 to serve as a political relief valve during the controversy over the Tellico Dam and the snail darter.

Table 1: Conflicting Activities and the Number of Recovery Plans in Which Each Is Mentioned

Agriculture	153
Cattle	100
Collecting	117
Development	245
Grazing	128
Habitat manipulation	199
Hunting/fishing	83
Irrigation	43
Mining	121
Off-road vehicles	63
Outdoor recreation	146
Pesticides	150
Water development	147
Wetlands degradation	21

Source: National Wilderness Institute 1994, 39

When the ESA was first passed, it did not include a provision for private citizens to have the same right to consult and receive recommendations for “reasonable and prudent” alternatives. There was no mechanism for property owners to request a written opinion about whether activities on their land adversely affected a listed species; nor could they apply for an exemption from the requirements of the Act. In 1982, Congress remedied that inequity with an amendment to section 10 of the Act, allowing the Fish and Wildlife Service and the National Marine Fisheries Service to issue incidental take permits to private parties meeting certain requirements. Those requirements, as stipulated in the regulations adopted in 1984 by the Fish and Wildlife Service (see 50 C.F.R. secs. 17.22b, 17.32b) and in 1990 by the National Marine Fisheries Service (see 50 C.F.R. secs. 222.22), require applicants for an incidental take permit to submit a Habitat Conservation Plan (HCP). A proposed HCP must include an assessment of impacts likely to result from the proposed taking; measures the permit applicant will undertake to monitor, minimize, and mitigate such impacts; a listing of alternative actions and reasons for not adopting them; and additional measures the permitting agency may require as “necessary and appropriate.”

One problem for property owners granted some of the early HCPs was the continuing threat that the federal agency could come back and claim that the agreement was not sufficient, that something new was required once new and better information had become available. In response, the Clinton administration adopted a new policy in August 1994 entitled “No Surprises: Assuring Certainty for Private Landowners in Endangered Species Act Habitat Conservation Planning” (the “No Surprises” policy).

As Secretary Babbitt (1997a) explained in a July 17, 1997, speech at the National Press Club,

We thought about [future changes to HCPs] and fought about it, and said, you know, if we're going to make this act work on the ground in the real world, and ask timber companies and developers to make those kinds of concessions to find that balance, we've got to establish one simple commonsense principle, and that is one bite at the apple—take a good one—thrash it out, but then say to the developer, “Okay, a deal's a deal—there aren't going to be any surprises.” And if it turns out that we need a little more habitat or a few more adjustments, well then the obligation should be on the public, the participating public agencies, including the federal government, to put up the resources to rebalance the plan.²

By adopting the “No Surprises” policy, the Clinton administration officially recognized that previous arrangements had been deals that the private parties, but not the government, were required to live by. “No Surprises” was an attempt to correct that problem.

Secretary Babbitt's comments highlight the cost issue. Even under the HCP process, the property owner or developer has to mitigate his incidental taking of endangered species by providing land, money, procedures, or whatever is necessary. Babbitt says the agencies will take as large a bite of the private “apple” as they deem necessary, without compensating the owner, and then the landowner gets the rest of the apple.

One cynical but not unrealistic way of looking at HCPs and “No Surprises” is to view them as analogous to protection schemes.³ The property owner occupies much the same position as a small merchant on Chicago's South Side during the 1920s. The merchant was offered protection from unspecified future problems if he would purchase insurance. His decision to purchase was, of course, “voluntary,” and if he went along with the plan, he would be able to continue to operate his store

2. This quotation is from the transcript provided by the National Press Club the day after Babbitt's speech. The transcript available from the Department of the Interior (Babbitt 1997b) does not contain the phrase “And if it turns out that we need a little more habitat or a few more adjustments, well then the obligation should be on the public, the participating public agencies, including the federal government, to put up the resources to rebalance the plan.” The Department of the Interior's version of that portion of the speech reads:

“No surprises” is a policy that was worked out in the intense give and take that went into the Southern California NCCP process. This solution basically says that once the government and a landowner agree as to what, where, and how much shall be done to minimize and mitigate damage by a development project to a listed species, both sides must then stick to that package. The government cannot come back to the landowner pleading for more. It boils down to four words: “A deal's a deal.” I am absolutely convinced that it is fair and that the idea of closure that it embodies is essential to bringing the private sector into the conservation process.

3. Ike Sugg of the Exotic Wildlife Association suggested this analogy.

without “surprises.” The modern property owner with endangered species on his property has the same deal. If he gives up a portion of his property or some of its potential uses “voluntarily,” he will be able to use the rest of his property, with no “surprises.”

Taking Private Property under the ESA

The ESA limits activities on public and private lands designated as endangered-species habitat. Given that two-thirds of U.S. lands belong to private owners, endangered-species policy entails federal control over much private property. Ninety-five percent of private lands are classified as “rural and non-developed,” and those lands harbor the broadest diversity of species, including endangered species. According to data published by the U.S. General Accounting Office (1994), more than 75 percent of listed species in the United States depend on private land for all or part of their habitat requirements. Lynn Dwyer, Dennis Murphy, and Paul Ehrlich (1995, 736) found that fully 50 percent of federally protected species are found exclusively on private land. Although the distribution across private and public lands of the roughly 3,000 species being considered for listing under the ESA is not known (Carroll 1996, 5), a reasonable assumption is that they are distributed similarly.

Texas provides an illustration of the impact the ESA is having on private property owners. Ninety-five percent of the land in Texas is private, and that land supports 82 federally listed species and 305 candidate species. The result is that the costs of protecting and conserving endangered species in Texas fall on rural landowners, who are primarily farmers and ranchers. In most cases, they must bear those costs without compensation or assistance (McKinney 1993, 63–65).

Endangered-species policy makes it unlawful for any private citizen to interfere in any way with an endangered species or its habitat, and it imposes severe penalties on those who do. Farmers violate the ESA if they plow their land and in some cases even if they allow grazing on a pasture when an endangered species is present. In many cases, property owners are prohibited from cutting trees, clearing brush, using pesticides, planting crops, building homes, protecting livestock or even themselves from predators, and building roads. They are often required to set aside numerous acres for no purpose other than aiding the endangered species.

One illustration of how government agents try to use the ESA is provided by the case of *U.S. Fish and Wildlife Service v. Shuler*. In March 1994, a Department of the Interior administrative law judge fined Montana rancher John Shuler \$4,000 for killing a grizzly bear. The bear was one of four the rancher found outside his home one summer night in 1989. The bears had previously killed \$1,200 worth of sheep, and the rancher, upon seeing one from his living-room window, ran outside with his rifle. About thirty feet from his house, three bears were running through his flock. He fired over them, and a fourth bear came out of the dark and turned as if to attack him. The

rancher shot the bear and assumed it was dead. The next day he found it was still alive. When it reared up on its haunches and came after him, he shot the bear twice more, finally killing it.

The Department of the Interior initially assessed a \$7,000 penalty for “taking” the bear in violation of the ESA. Shuler appealed under the Act’s self-defense clause, but Interior’s judge ruled the rancher wasn’t defending his life, just his property, and that he was “blameworthy to some degree in bringing about the occasion for the need to use deadly force.” He could have watched from the safety of his living room while the bears devoured his sheep. But he “purposefully place[d] himself in the zone of imminent danger of a bear attack.” Even so, the judge reduced the fine from the original \$7,000 to \$4,000 (Sugg 1993, A15).⁴ Shuler then appealed to Interior’s Ad Hoc Appeals Board, which upheld the initial ruling and increased the fine to \$5,000. The board rejected Shuler’s claim of self-defense and argued that his dog, which had gone on point when the bear reared, had “provoked the bear.” Shuler’s final step was to appeal to the U.S. District Court for the District of Montana. On March 17, 1998, nearly nine years after he had confronted the bears, his conviction and fine were finally vacated.⁵

The dollar costs imposed by the ESA can be substantial. Property values in Travis County, Texas, dropped \$359 million after the golden-cheeked warbler and black-capped vireo were listed as endangered (Wilkinson 1993, 15). One Texan saw the appraised value of her land fall from \$830,000 to \$38,000 (Adler 1995, 3), and the state of Texas is losing \$2 million in taxes each year because of property-tax assessment declines caused by the ESA (Wilkinson 1993, 15). People whose investments are tied up in land have had their retirement plans nearly wiped out by the listing of the warbler and the vireo, because their property now has little value and is nearly impossible to sell.

In North Carolina, Ben Cone had 1,560 acres of his 7,000 acres of land taken by the ESA to provide habitat for the red-cockaded woodpecker. He still owns the land,

4. Defenders of Wildlife tell the story somewhat differently. The following is posted on their Web site (<http://www.defenders.org/esatop.html>):

John Shuler did not shoot the bear in self-defense, as he claimed, and could have taken a legal route to have the bear removed or killed. The regulations regarding grizzlies clearly allow people to shoot bears in self-defense when there is a real threat. On a few occasions in 1989, a few bears entered John Shuler’s sheep bedding area and killed a number of sheep. Wildlife officials began trapping in the area and prepared to dart bears in order to remove them from the area. They also offered to finance the installation of an electric fence to protect the corral but Mr. Shuler refused the offer. Before officials could remove or kill the problem bear, Mr. Shuler shot it in his corral. He did not notify USFWS. The next morning he found it lying about 400 yards from his house and he shot it again although it was already mortally wounded. Mr. Shuler was fined by the court because there was no evidence to suggest that Mr. Schuler was defending himself. After the incident, Defenders of Wildlife and the Great Bear Foundation jointly paid for the construction of a large electric fence for Mr. Shuler’s corral. Since the construction of the fence, no livestock have been killed by bears inside the corral.

5. See U.S. District Court for the District of Montana, Case No. 96-110-GF-PGH.

of course, but no timber may be harvested within a half-mile radius of each colony of woodpeckers. In addition, each colony must be protected from the controlled burning Cone does to improve wildlife habitat on his property, so now he has to rake and bushhog around each nest tree before burning because a burned tree would constitute a taking under the ESA.

In addition to increased management costs, Cone has suffered a loss of land value. He had the 1,560 acres appraised in 1993 and found that, absent the woodpeckers, the estimated value of the hunting leases, timber, and pine straw was \$2,230,000. With the woodpeckers, the land was worth just \$86,500, or 96 percent less. The twenty-nine birds therefore cost Cone \$73,914 each, a cost he alone has borne.⁶

In order to protect the rest of his land from the same loss of value, Cone began clear-cutting more acres annually than he had previously, in order to decrease the amount of habitat attractive to red-cockaded woodpeckers. He also sent a letter to adjacent property owners informing them of their possible liabilities if the woodpecker nested on their lands. They immediately began clear-cutting their timber adjacent to Cone's property (Welch 1994, 151–97).

Cone's story generated a great deal of interest in the press and in Congress. In response, Defenders of Wildlife listed his story as one of the "top ten lies about the ESA." They posted the following claim on their Web site (<http://www.defenders.org/esatop.html>):

Ben Cone has been legally using his property for years in a variety of ways, including timber sales. Mr. Cone's land had been managed as a quail plantation, which provides good habitat for red-cockaded woodpeckers. USFWS offered to enter into a Habitat Conservation Plan which would allow Mr. Cone to harvest the timber and would provide for the incidental take of future woodpeckers that might occupy any thinned areas. Mr. Cone declined to enter into an HCP, but did submit a management plan, which was approved. He continues to sell pine straw from his property, operate a hunting lease on it, and harvest timber on it.

This version of the story is technically correct but misleading. Cone was offered a Habitat Conservation Plan that would have allowed him to log all of his land except for the acres of woodpecker habitat. Thus, by signing the agreement, he would have relinquished his right to receive compensation for the timber on those acres, which was valued at \$1,425,000. Even without signing the plan he already had the right to

6. Cleaves et al. (1994) provide cost data against which Cone's may be compared. They compared the cost of private red-cockaded woodpecker (RCW) conservation relative to timber stocking, ownership parcel size, and cluster size. "Given the smallest RCW cluster size, [RCW protection on] 60-acre parcels showed costs of \$1,200 per acre, or 28 percent of maximum present value; 300-acre parcel costs were \$143 per acre, or 3 percent of maximum present value. The total cost of providing for one RCW cluster on a 60-acre parcel was \$72,000 compared with \$42,900 for a 300-acre parcel."

cut timber on the portion of his property not occupied by woodpeckers. Cone does continue to rake pine straw on his land and to sell hunting leases. The total income from these activities on all 7,000 acres is less than \$20,000 per year—hardly comparable to the \$1.4 million in forgone timber revenues.

Although there are many stories similar to Cone's, reducing property values by listing a species under the ESA is not considered a "taking" under the U.S. Constitution. A constitutional "taking" refers to the phrase in the Fifth Amendment that states "nor shall private property be taken for public use, without just compensation." (It is not to be confused with the "taking" of an endangered species. Under the 1973 legislation, to take an endangered species is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in such conduct.") Under a strict interpretation of the Fifth Amendment, an owner whose property has been devalued because of government regulations could file a claim and be compensated, but no court has yet adopted this strict definition.

Until 1922, the U.S. Supreme Court required that a Fifth Amendment taking involve actual government appropriation or physical invasion of private property. However, in *Pennsylvania Coal v. Mahon* (260 U.S. 393 [1922]), the Court decided that the regulation of property use can constitute a taking and required compensation in that particular case. Opponents of the ESA's regulatory powers argue that ESA designations do, in fact, constitute a taking of private property without just compensation (Welch 1994, 186). But proponents of the ESA's existing broad powers argue that the ESA's provisions constitute a kind of zoning, and courts have not considered zoning laws to be a constitutional taking (Dwyer, Murphy, and Ehrlich 1995). Flagstaff, Arizona, for example, uses its zoning powers to prohibit landowners from cutting down pine trees within the city limits except to make room for improvements authorized under the city's planning and building codes. Similarly, Palmdale, California, prohibits landowners from cutting Joshua trees, a species of yucca, on their land. If the ESA is interpreted as simply zoning, then Secretary Babbitt may have been correct to say that "the Fish and Wildlife Service has never come close to a constitutional taking" (1994, 55).

Although a 1995 Supreme Court decision, *Babbitt v. Sweet Home Chapters of Communities for a Greater Oregon* (515 U.S. 687), has been interpreted by some as strengthening Babbitt's position, the Court actually avoided the takings issue. The question before the Court was whether the definition of "harm" to an endangered species included habitat modification. The Court ruled that Congress meant to include habitat modification in the definition of harm and that the Fish and Wildlife Service's application of regulations prohibiting certain uses of private lands was consistent with congressional intent.

The Court's failure to decide whether the regulations constituted a taking of private property without just compensation is striking in light of two previous decisions that suggested the Court was moving in a direction that would allow FWS actions to be defined as takings. The first case was brought by a South Carolina resident,

Mr. Lucas, who bought two residential lots on a South Carolina barrier island with the intention of building single-family homes. After he purchased the property, the state enacted the Beachfront Management Act, which barred him from erecting any permanent, habitable structures on his land. He sued the state agency, asserting that the ban on construction deprived him of the “economically viable use” of his property and was therefore a taking. The Court ruled in his favor and stated that government regulation of land that completely eliminates the economic use is per se a taking (*Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 [1992]).

The second case was filed after the city of Tigard, Oregon, denied Florence Dolan a building permit for her property unless she dedicated 7,000 square feet of land for storm-water management and a park. The Supreme Court ruled in her favor, declaring that the city was attempting to force Dolan “to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.” The majority opinion further stated that the city should not try to avoid “the constitutional way” of paying for what it wants and that the Fifth Amendment should not be relegated to the status of “poor relation” compared with other amendments in the Bill of Rights (*Dolan v. City of Tigard*, 515 U.S. 374 [1994]).

When property values are being reduced from \$900,000 to \$38,000, as in the case of the the Texas woman, or from \$2,230,000 to \$86,500 as in Ben Cone’s case, it is at least plausible that the Court might declare that ESA regulations amount to an attempt to avoid “the constitutional way” of paying for what Congress wants and are therefore unconstitutional takings. Clearly, Justice Scalia seems ready to make such an argument. In his dissenting opinion to the *Sweet Home* decision, he wrote that “the Court’s holding that the hunting and killing prohibition incidentally preserves habitat on private lands imposes unfairness to the point of financial ruin—not just upon the rich, but upon the simplest farmer who finds his land conscripted to national zoological use.” If Scalia’s position became the majority opinion in a case that claimed FWS regulations were taking property without just compensation, protecting species would require far more innovation than heretofore seen.

Environmentalists greatly fear such a decision by the Court, because they believe it would make the costs of protecting species prohibitive, and they are fearful of congressional actions that might have similar effects (Dwyer, Murphy, and Ehrlich 1995). Tim Eichenberg, program counsel for the Center for Marine Conservation, reflected that fear in his comments regarding the *Sweet Home* decision. He called the Court’s decision “a welcome dose of sanity in what has become an irrational and shortsighted rush in Congress to undo one of our nation’s most important environmental laws” (quoted in Sturges 1995, 126). Some Republican members of Congress responded to *Sweet Home* by calling for immediate action to protect the rights of property owners (Pombo 1995). Secretary Babbitt called one property-rights bill introduced in Congress a “proposed raid on the public treasury” (1994, 55). If that bill had passed, it

would have required federal agencies to compensate property owners for any diminution in value caused by any regulatory action taken under the authority of any environmental laws, including the Endangered Species Act.⁷

Warm-Hearted Dishonesty

Endangered-species policy had a warm-hearted beginning. Most members of Congress thought they were protecting charismatic species—grizzlies, whales, manatees, whooping cranes, bald eagles, and the like. But the laws they wrote protect far more species. Charismatic species are relatively few—birds, mammals, and other vertebrates as a whole constitute only about twenty percent of the 1.4 million known species. The rest are primarily insects and plants (Wilson 1992, 131–37), most of which are not charismatic.

Lawmakers also did not expect the ESA to be used as a land-use-planning tool, but if any one of the birds, mammals, plants, insects or fungi located on a person's land is listed as endangered, the ESA controls many of the uses of that land. Restrictions can result in anything from mild irritations to the loss of almost all land value. Congress required that, in listing species, the secretary of the interior not consider economic effects. This law is the basis for court decisions and agency regulations that claim every species has infinite value. But policy makers have not considered that protecting subjects with infinite value might require infinite funds; nor have they acted in accord with the assertion of infinite value.

Proponents of the ESA claim that it saves species, but they offer little evidence beyond the number of threatened and endangered species listed each year, as if listing instead of delisting were the real purpose of the law.

Endangered-species policy has become an exercise in environmental theology and political dishonesty. Few politicians, judges, bureaucrats, or endangered-species activists intend to be dishonest. They simply fail to recognize the incentives created by the ESA or to consider less emotionally satisfying but more practical means of protecting biodiversity. It is time to stop preaching species rights and promoting ineffective policy. Instead, policy makers need to ask: Why do the lists of endangered and threatened species keep getting ever longer? Why have only a few species ever been taken off the list? Where will the money come from to pay for protecting the species on the lists as well as the thousands waiting to be listed?

7. Contrary to Secretary Babbitt's claim, I believe it would be good for endangered-species policy if the courts or Congress decided that regulatory takings were unconstitutional. It would immediately make the costs of preserving species more apparent and would, therefore, spur the search for a broad range of innovative approaches. The net effect would be a diversity of policy instruments that would operate in the political economy much as biodiversity works in the ecology—some would fail, but the adaptive, flexible ones would succeed.

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