Property Rights And

The Endangered Species Act

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EXECUTIVE SUMMARY

The Endangered Species Act (ESA) attempts to protect endangered species on private land through a regulatory approach that essentially grants property rights to species while limiting, without compensation, the property rights of the individuals who own the land. This paper examines the implications and outcomes of the ESA's regulatory approach.

The focus is on incentives and how they affect outcomes, based on the practical reality that legal rules change people's actions. The central questions are:

(1) how do people react to standing, according to the law, "in the same position as a poacher taking aim at a whooping crane;"
(2) is the ESA an effective way to protect species; and
(3) are there alternatives based on respect for individual property rights that would better protect species?

The answer to the first question, how people react to having their property rights abridged by the Endangered Species Act, is that at least some of them take legal and even illegal preemptive actions. Potential results include active habitat destruction, passive non-protection, and an unwillingness to undertake improvements.

The answer to the question about the efficacy of the ESA is unclear. For many endangered and threatened species, the ESA may be slowing the slide toward extinction. Given the incentives the ESA creates for landowners, however, it may be hastening extinction for many species. It is clear that the ESA creates negative incentives for landowners and perverse incentives for government regulators.

Instead of trying to save species by, in effect, conscripting private property to national zoological use, a more effective strategy is to offer rewards that align the interests of property owners with species protection. As Aldo Leopold wrote, "[C]onservation will ultimately boil down to rewarding the private landowner who conserves the public interest." Three methods of synchronizing public and private interests discussed in the paper are rental contracts that pay landowners based on success in meeting conservation goals, compensation funds to indemnify landowners for damage done by certain endangered species, and conservation concessions that pay landowners to forgo development. Each of these methods has been tested in practice with favorable results.

Unless the Supreme Court changes its interpretation of what constitutes a Fifth Amendment taking of property, there is little hope for a court-enforced change in current law. It is up to Congress to implement endangered species policies that protect species by respecting property rights.

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Introduction

The Endangered Species Act (ESA) became law with President Richard Nixon's signature in 1973. The act prohibited "taking" an endangered species, which is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in such conduct." The U.S. Fish and Wildlife Service (FWS) interpreted "harm" to include habitat modification on public and private lands.

Regulations based on that interpretation were controversial because they became a form of national land-use controls. The U.S. Supreme Court mostly settled the legal controversy in a 1995 court case, Babbitt v. Sweet Home Chapter Of Communities For A Great Oregon (Sweet Home). In that case, the court agreed that habitat modification is indeed a harm under the ESA and that regulatory control of private property in the name of species protection is allowable under the ESA. Thus, "a forest landowner harvesting timber, a farmer plowing new ground, or developer clearing land for a shopping center stood in the same position as a poacher taking aim at a whooping crane."[1]

Many property owners claim that ESA regulations violate the "takings" clause of the Fifth Amendment, which states that no person will "be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation." Owners whose property has been devalued because of ESA regulations have attempted to claim compensation, but none have yet been successful. On the other hand, the government's power to prohibit a private landowner from "taking" a red wolf on his property has been upheld (Gibbs v. Babbitt).

This paper examines the implications and outcomes of protecting endangered species on private land by regulation, that is, by essentially granting property rights to species instead of to individuals. The focus is on incentives and outcomes as opposed to rights and wrongs. This approach assumes that legal rules change people's actions. The central questions are:

[1]M. Bean, "Endangered Species: Endangered Act?" *Environment*, January 1999.

(1) how do people react to standing, according to the law, "in the same position as a poacher taking aim at a whooping crane;"
(2) is the ESA an effective way to protect species; and
(3) are there property-rights based alternatives that will better protect species?

History of ESA and Property

The first national endangered species act was passed in 1966. Called "The Endangered Species Preservation Act," its primary function was to create an endangered species list and to spend money from the Land and Conservation Funds to purchase habitat for the protection of the species listed. Three years later the Endangered Species Conservation Act of 1969 established two lists, one for species living anywhere outside the United States and the other for species living in the United States.

After declaring that "even the most recent act to protect endangered species, which dates only from 1969, simply does not provide the kind of management tools needed to act early enough to save a vanishing species,"[2] President Richard M. Nixon called for a new and stronger law. Congress responded with the 1973 Endangered Species Act. The act was amended in 1982.

The ESA contains several features that affect property:

- The Secretary of the Interior (or the Secretary of Commerce through the National Marine Fisheries Service for marine species) formally lists a species as endangered or threatened. Contrary to previous acts, *any* species, subspecies, or distinct subpopulation of fish, wildlife, and plants can be considered for listing. The listing is to be done "solely on the basis of the best scientific and commercial data," that is, without referencing any economic or property rights impacts.

- Section 7 establishes federal agency obligations. Each federal agency is required to "insure" that its actions are "not likely to jeopardize the continued existence of any endangered species or threatened species," or harm designated critical habitat. The property impacts of these requirements for federal agencies are that any private actions requiring a permit from a federal agency, such as filling or dredging wetland, crossing a stream with utility lines or a bridge, and cutting timber or making other use of federal lands, are subject to ESA review.

- Under Section 7, the agencies are required to ensure that their actions do not modify or destroy a species' "critical habitat." Although critical habitat is not defined, it apparently

[2]R. Nixon, *Public Papers of the Presidents of the United States: Richard Nixon*, 1972 (Washington, DC: Government Printing Office, 1974), p. 183.

means an area essential to the species that may require special management. It includes areas occupied by the species at the time of listing that have physical or biological features necessary for the species. Critical habitat may also contain areas not occupied by the species but which the Secretary determines may become necessary to the species in the future. Unlike the original listing decision, economic impacts may be considered in the decision of what areas to include as critical habitat. Because critical habitat is a Section 7 requirement, it only applies directly to federal agencies. Private and public property, however, are often included in the designated habitat areas, and any private actions within the critical habitat requiring federal permits are subject to ESA review.

- Where the 1966 act limited endangered species protection on private land to direct purchase of the affected lands, landowners were now told under ESA Section 9 not to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in such conduct." Furthermore, "harm" was defined as adversely modifying habitat.

- The 1982 amendments relaxed the Section 9 absolute prohibition on taking a species and authorized permits for "incidental takes," which are incidental to and not the main purpose of an otherwise legal activity. To obtain an incidental take permit, a landowner must submit a habitat conservation plan (HCP) that identifies the impacts of the proposed taking and actions that will be taken to mitigate the taking. Without an approved HCP, permits to take the actions that will result in an "incidental take" will not be issued.

- Only 14 incidental take permits were approved during the first decade after the 1982 amendments, but the Clinton Administration saw them as a way to avoid what former interior Secretary Babbitt foresaw as a "train wreck" between property interests and the ESA. He initiated streamlined procedures and new policies that resulted in 492 incidental take permits being granted through August 2001.

- Babbitt's initiatives included the "no surprises" rule and "safe harbor" agreements. "No surprises" proposed to promise landowners that once they entered into an HCP there would be no future surprises. As Secretary Babbitt explained, "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."[3] The "no surprises" policy as originally proposed was not enacted into law. Instead, the final rule on Safe Harbor and Candidate Conservation

[3]B. Babbitt, "Address by Bruce Babbitt, Secretary of the Interior, to National Press Club luncheon, July 18, 1997," Washington, DC: Federal News Service.

Agreements (64 *FR* 32705; June 17, 1999) allows for an incidental take permit to be revoked even if it contains "no surprises" agreements.[4]

- "Safe Harbor" agreements are voluntarily developed between landowners and the FWS. They allow landowners to carry out activities expected to benefit an endangered species without having their responsibilities under the ESA restrictions expanded beyond the (baseline) levels existing at the time the agreement is agreed to. A safe harbor agreement is not an incidental take permit in that it does not confer a right to harm any endangered species already present when the agreement is entered into (the landowner's "baseline" responsibilities).

Prior to 1982, the ESA's absolute restrictions on taking a species stated in Section 9 were poorly enforced. The tacit understanding between regulators and landowners was "don't ask, don't tell." Landowners did not ask for approval to destroy habitat and regulators seldom told on them.[5] But by creating HCPs, the 1982 amendments to the ESA gave government regulators their first practical tool for regulating private land—they could require that landowners develop a conservation and mitigation plan before modifying any habitat. Only then, would they be allowed to legally "take" a species as they modified their lands in ways that were otherwise legal.

One major concern for landowners was whether the government would keep its part of the deal. That is, once a deal had been struck that allowed habitat to be modified and a conservation plan was in place, what was to keep the government from coming back and demanding more from the landowner? As former Secretary Babbitt explained in a July 17, 1997 speech at the National Press Club,

> ...we've got to establish one simple common-sense 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."[6]

But most of the environmental community believes the government must have the power to renege on the deal and impose new regulations because of changes in information and the reality of unforeseen events such as fires, flood, disease, and earthquake. The no-surprises rule, as it was eventually adopted,[7] grants that power. It allows the FWS to revoke unilaterally an

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[4]E. H. Buck, M. L. Corn and P. Baldwin, "Endangered Species: Difficult Choices," *CRS Issue Brief for Congress (CRS Report IB10072)*, November 9, 2001.

[5]M. Bean, *op. cit.*

[6]B. Babbitt, *op. cit.*

[7]64*FR* 32705; June 17, 1999.

incidental take permit without the consent of the permittee. Thus, to use Babbitt's metaphor, the government can come back and take another bite of the apple without paying for it.

All these property-related features of the ESA can have serious impacts on the value of one's property and on potential uses, although "no surprises" and "safe harbor" are attempts to reduce those impacts. One of the controversial legal issues they raise is whether ESA restrictions on the use of private property are constitutional. Do they violate the Fifth Amendment requirement against private property being "taken for public use without just compensation?" No court has yet found the ESA's regulations of private land to require compensation, but the reasons are complicated and the state of the law is somewhat inconclusive.

The Supreme Court sets very high standards for a Fifth Amendment taking claim.[8] Standards that affect potential ESA takings require:

- Extreme instances of property value loss. Since property value loss is measured for the property as a whole, losing total economic value of only a portion of one's property does not qualify as a compensable taking.

- Meeting the "ripeness" requirements. There are three prongs to the ripeness requirement: (1) the prohibitions must be applied to the plaintiff's specific parcel, (2) any potential exemptions to the rule must have been applied for and denied, and (3) unless it is futile, the landowner must submit scaled-down (but still profitable) proposals and have them also denied. Listing a species would not meet the ripeness requirement nor would serving a landowner notice that his proposed activity would be prosecuted as a Section 9 taking. Where a party claims the application of the ESA deprives him of all economically viable use of all his property, he must apply for and be denied an incidental take permit that would allow him to make a profit. In all likelihood, he must apply for another, more restrictive permit that would still allow him to make a profit before his taking claim is ripe.[9]

Given the standards the court has established for claiming an unconstitutional taking, it is not surprising that no landowner has successfully challenged the ESA under the Fifth Amendment. Justice Scalia seems ready to support less restrictive standards. 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

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[8]W. L. Kellington, "New Takes on Old Takes: A Takings Law Update," S GO21 AIL-ABA 511, August 16-18, 2001; R. Melta, "The Endangered Species Act and Private Property: A Legal Primer," *CRS Report for Congress (93-346),* March 7, 1993.

[9]See, for example, Boise Cascade v. State, 164 Or. App. 114 (1999).

conscripted to national zoological use." An April, 2001 decision may be a precedent-setting move in Scalia's direction. The U.S. Court of Federal Claims ruled that compensation had to be paid if water were taken from California irrigators to benefit endangered fish.[10] It is unclear, however, whether the particular facts of that case will be applicable to other ESA takings litigation.

Effects of Legal Rules on Species

What have been the results of conscripting private lands "to national zoological use?" In the past twenty-eight years, almost all of the activity under the ESA has been on the listing side of the process with few clear results on the recovery side. The number of listed species has increased more than ten times, from 114 in 1973 to 1,249 today. The Fish and Wildlife Service's most recent report on the status of endangered species found that fewer than one in ten is improving, four in ten are in decline, and they do not know the status of the rest. Of the species found exclusively on federal land, only 18 percent are improving and just three percent of those found on private land are improving.[11]

Thirty-two species have been delisted, seven because they went extinct and twelve more because the original data used to justify listing were incorrect. The FWS claims that thirteen species that were once listed are now recovered.[12] Of those thirteen, three are Australian kangaroo species that were delisted when the Australian government changed its management practices. Six more may be cases of data error, which is certainly the case with the gray whale and American alligator. The brown pelican's and Arctic peregrine falcon's decline was from reproductive failure due to the pesticide DDT and their 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. The American peregrine falcon, also a near-casualty from DDT, recovered after the DDT ban and because of reintroduction efforts by private parties. The Aleutian Goose recovered because of actions taken by the California Fish and Game Commission and the FWS, acting under the ESA. Thus, claims that the ESA is responsible for species recovery and delisting are weak at best.

There are some highly visible ESA programs that appear to be having some success. These include releasing experimental populations of California Condors in California and gray

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[10]Tulare Lake Basin Water Storage District, et al. v. US, No. 98-101L.

[11]U.S. Fish and Wildlife Service, *Report to Congress, Recovery Program, Endangered and Threatened Species* (Washington, DC: U.S. Fish and Wildlife Service, 1994).

[12]U.S. Fish and Wildlife Service 2001, "General Statistics for Endangered Species," accessed on the World Wide Web on November 20, 2001 at http://ecos.fws.gov/servlet/TessStatReport.

wolves in Yellowstone, leading whooping cranes along historic migration paths with ultralight airplanes, and cooperating with falcon breeders to restore the American peregrine falcon, to mention a few.

Measuring success by numbers of species delisted or by visible reintroduction programs may be the wrong measurements, however. After all, only seven of the species listed since the act was signed in 1973 are now extinct, and most species were listed only after they were well on the way to extinction. Reversing all of the causes of near extinction and having populations begin to recover takes time, perhaps a very long time. Thus, expecting listed species to be on their way to recovery may be the wrong expectation. The only reasonable short-run expectation for many species may be to slow their slide toward extinction while habitats are protected and helped to achieve once again the biological richness that is necessary for the endangered species to begin to recover. Accepting this expectation, however, does not mean that the ESA is the best way to slow or prevent extinction.

Effects of Legal Rules on Landowners

Nearly 80 percent of all listed species occur partially or entirely on private lands. Many analysts agree with Michael Bean of the Environmental Defense Fund that one overall effect of enforcing the ESA has been to create "unintended negative consequences, including antagonizing many of the landowners whose actions will ultimately determine the fate of many species."[13] Bean underscored these problems in a 1994 speech at a training and education seminar sponsored by the Fish and Wildlife Service for government employees. There is, he said, "increasing evidence that at least some private landowners are actively managing their land so as to avoid potential endangered species problems." By that, he meant the landowners are removing habitat that might attract an endangered species. He emphasized, however, that these actions are "not the result of malice toward the environment" but are instead "fairly rational decisions, motivated by a desire to avoid potentially significant economic constraints." He even said they are a "predictable response to the familiar perverse incentives that sometimes accompany regulatory programs, not just the endangered species program but others."[14]

The National Association of Home Builders explains in their *Developer's Guide to Endangered Species Regulation*, "farming, denuding of property, and managing the vegetation in ways that prevent the presence of such species are often employed in areas where ESA

[13]M. Bean, *op. cit.*

[14]M. Bean quoted in B. Seasholes, "Anecdotes on Perverse Incentives under the Endangered Species Act," (Washington, DC: Competitive Enterprise Institute, 1997).

conflicts are known to occur."[15] Similarly, the authors of an Environmental Defense Fund report (one of the authors was Michael Bean) note that the ESA discourages private landowners from protecting, creating, restoring or enhancing habitat for endangered species. They explain:

> Their unwillingness often stems from the fear of new restrictions. They are afraid that if they take actions that attract new endangered species to their land or increase the populations of the endangered species that are already there, their "reward" for doing so will be more regulatory restriction on the use of their property. In its most extreme manifestation, this fear has prompted some landowners to destroy unoccupied habitats of endangered species before the animals could find it. One landowner, referring to the presence of red-cockaded woodpeckers on a small section of his property, announced, "I cannot afford to let those woodpeckers take over the rest of the property. I'm going to start massive clearcutting."[16]

Starting "massive clearcutting" is one manifestation of what is now known as "preemptive habitat destruction." One clear case of preemptive habitat destruction occurred when a property owner made sure there would not be any San Diego mesa mint on his 279 acres where he wanted to build a 1,429-unit subdivision. His property contained one of only three populations of the mint, but when he discovered the mint was about to be added to the endangered species list, he "bulldozed the population while it was still unprotected."[17]

Although there are many stories of preemptive habitat destruction (one term used is "shoot, shovel, and shut up!"), there are few studies that rely on hard, systematic data. There is, however, one systematic study of preemptive habitat destruction that examines timber-harvest practices in forests occupied by red-cockaded woodpeckers. The authors, Lueck and Michael, used data from over 1,000 individual forest plots from the U.S. Forest Service's Forest Inventory and Analysis and a 1997-98 North Carolina State University survey of over 400 landowners.[18]

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[15]National Association of Home Builders, *Developer's Guide to Endangered Species Regulation* (Washington, DC: Home Builder Press, 1996).

[16]D.S. Wilcove, M.J.Bean, R. Bonnie, and M. McMillan, "Rebuilding the Ark: Toward a More Effective Endangered Species Act for Private Land," Defenders of Wildlife, 1994, retrieved on November 24, 2001 from the World Wide Web at http://www.edf.org/pubs/Reports/help-esa/index.html.

[17]C.C. Mann and M.L. Plummer, *Noah's Choice: The Future of Endangered Species* (New York: Alfred Knopf, 1995).

[18]D. Lueck and J. Michael, "Preemptive Habitat Destruction Under the Endangered Species Act," Working Paper 99-1, PERC, Bozeman, MT.

Red-cockaded woodpeckers provide a good test of claims that the ESA produces perverse incentives. The birds have been on the endangered species list for 25 years. They live in colonies consisting of the breeding pair, the current year's offspring, and sons of the breeding male. They depend on mature stands of southern pine—they only nest or roost in cavities in living pine trees that are at least 60 years old—which means there is a clearly measurable test of habitat modification. There are no other endangered species using the same habitat so there are no competing ESA policies that might make it difficult to measure the effects of policies to protect woodpeckers.

Lueck and Michael found that trees close to colonies of red-cockaded woodpeckers are logged long before they are mature. That is, the trees are not allowed to get old enough to provide nesting cavities for the birds. As distance from a known colony of woodpeckers increases, the chance of harvest decreases and the age at which the forest is harvested increases. The authors conclude, "This evidence from two separate micro-level data sets, indicates [red-cockaded woodpecker] habitat has been reduced on private land *because of the ESA*" [emphasis in original]. In fact, enough habitat was reduced *because of the ESA* between 1984 and 1990 to have supported a woodpecker population sufficient to meet the FWS' recovery goals for the species, according to one set of Lueck and Michael's estimates.

It appears that the answer to how people react to standing "in the same position as a poacher taking aim at a whooping crane" is that at least some of them take legal and even illegal preemptive actions. Potential results include active habitat destruction, passive non-protection, and an unwillingness to undertake improvements. It would be surprising if other regulations did not produce similar results, and Lueck and Mitchell identify some. They relate how, when stricter wetland draining rules were proposed in North Carolina, "landowners went on a drainage and ditching spree." In just a few months, 15-20 times more wetlands were developed than were normally developed in an entire year.[19]

The "no surprises" rule, as Babbitt proposed it, might have been a way to reduce some of this preemptive habitat destruction because it would have been a way to shift much of the risk of habitat protection from the individual landowner to the federal government.[20] If the Lueck and Michael analysis is correct, then such a shift could greatly improve the chances of landowners choosing to participate positively in conservation. But since the "no surprises" turned out to allow regulators to spring surprises on landowners after all, we should expect much less

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[19]J. E. Shiffer, "Landowners Saw Opportunity in Government's Delay," *The News and Observer*, Raleigh, NC, March 7, 1999, p. B1. Cited in Lueck and Michael.

[20]R.D. Thornton, "Habitat Conservation Plans: Frayed Safety Nets Or Creative Partnerships?" *Natural Resources and Environment*, 94, Fall 2001.

willingness to participate in HCPs and, at the same time, more preemptive habitat destruction wherever possible.

In fact, the rate of HCP development slowed dramatically by the end of the Clinton administration. Several reasons contributed to the slowdown. One was the uncertainty that a permit was actually a permit. Another was landowners' fear that simply initiating a habitat conservation planning effort would cause any development activity to stop during the HCP planning process. Since some HCPs have taken ten years to complete, HCP-created delays can significantly increase the costs of projects.[21]

Effects of Legal Rules on Regulators

Legal rules also affect those asked to carry them out. The rules prescribe some regulatory tools and proscribe others. They create incentives for some approaches to be followed and others to be ignored. The ESA encourages employees of the two agencies assigned the responsibility of protecting species (the Fish and Wildlife Service and the National Marine Fisheries Service) not to make tradeoffs between competing values; to act as if scarcity does not matter; to antagonize landowners; to spend large portions of their budgets on a few, large, charismatic species while spending little on other, far more ecologically important species; and, potentially, even to invent data to support their positions.

Until the 1982 amendments gave managers the ability really to control private lands, the ESA was largely symbolic. That is, Congress established grand-sounding legislation but placed little emphasis on actually accomplishing its ends. Congress often uses symbolism when creating laws regarding environmental and natural resource issues. A common tactic is to enact a law but not provide funds sufficient to accomplish its objectives. In addition, Congress often provides policy objectives that are completely unrealistic or gives agencies "lengthy lists of actions to take and deadlines to achieve that the agency cannot even begin to accomplish."[22] By claiming that every species has infinite value, Congress provided very little direction. After all, if everything is a priority then nothing is. Sometimes, politicians know their policies are so strict that they will not be enforced,[23] as was the case with Section 9 of the ESA prior to the 1982 amendments.

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[21]16 U.S.C. § 1536(d); Environmental Protection Information Center v. Pacific Lumber Company, 67 F. Supp. 2d 1090 (N.D. Cal. 1999) preliminarily enjoined timber harvest plan during preparation of a habitat conservation plan.

[22]G.C. Bryner, *Bureaucratic Discretion: Law and Policy in Federal Regulatory Agencies* (New York: Pergamon Press, 1987), p. 207.

[23]M. Lyons, "Political Self Interest and U.S. Environmental Policy," *Natural Resources Journal*, 39, 1999, pp. 271-294, quote on p. 288.

There are understandable political reasons for engaging in such symbolism. One is because "enthusiastic support is much more likely to be generated by dramatic promises than by modest, incremental proposals."[24] Another could be that Congress takes such actions in order to place blame for failures on the bureaucracy.[25] Symbolism may also be designed to "placate idealistic environmental groups and a superficially informed public."[26]

Agencies obviously find unrealistic and often unfunded promises impossible to keep. For example, requirements that every species is to be saved regardless of costs are good political statements but they cannot be achieved. They provide no guidance about how inevitable tradeoffs are to be accomplished. They deny that once policies have been implemented their marginal costs may outweigh their marginal benefits. Worse, they ignore the possibility that total costs may exceed total benefits. Given all this, it is possible to explain what might otherwise appear to be unexplainable actions by federal agents as they attempt to carry out their mandate to save species.

For economists, one of the more disturbing aspects of ESA enforcement is that government agents appear to ignore the fundamental economic problem, the problem of scarcity. Economist Richard Stroup explains:

> Resources for saving species are inevitably limited. They are scarce. For example, it is obvious that we can't set aside the entire acreage of the United States for wildlife habitat, and we can't set aside even a large part of that acreage without interfering with other uses. But the current Endangered Species Act, as it is now interpreted, represents an effort to avoid or disregard this fact. Government agents—primarily the U.S. Fish and Wildlife Service—have too often acted as though there are no limits, as though they are exempt from the problem of scarcity...
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> Yet the biologists have no economic incentive to limit their demands. Since they have no requirement to compensate the owners of the land they control, other people's land has no budgetary cost to them; it is available free of charge.[27]

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[24]Bryner, *op. cit.*, p. 207.

[25]M. Fiorina, *Congress, Keystone of the Washington Establishment* (New Haven: Yale University Press,1977), pp. 72-79.

[26]Lyons, *op. cit.*, p. 271.

[27]R. Stroup, "The Endangered Species Act: Making Innocent Species the Enemy," *PERC Policy Series*, PS-3 (Bozeman, MT: PERC, 1995).

Federal biologists have no economic incentive to limit their demands because they do not confront the opportunity costs of their actions the way landowners do. Limiting someone else's use of his or her own land is free to the biologist. Taking one regulatory action does not mean that another action cannot be taken elsewhere. That is, there are not the clear opportunity costs there would be if agency personnel were spending a finite budget and having to make tradeoffs between actions. Thus, there are no clear signals about valuing one action over another or for how to make tradeoffs between competing values.

Regulating private lands is not entirely free because landowners complain to their elected representatives who, in turn, hold hearings, start Congressional inquiries, introduce bills requiring compensation for regulatory takings, and threaten to cut agency budgets or reduce regulatory discretion. Bureaucrats respond by staging and advertising visible success stories. Reintroducing wolves to Yellowstone, releasing California Condors to the wild, or flying ultralight aircraft to lead whooping cranes along traditional migratory paths are three examples. These intensive efforts may have only a modest impact on the functioning of the ecosystem, but each of the species is large and charismatic. They create positive news stories. They allow regulators to better justify their regulations for all species.

All this suggests that regulators are not passive instruments waiting to receive orders from on high. Instead, they are far more likely to have agendas of their own and will work the regulatory system to achieve their goals. As Clark and Brunner explain in their study of endangered species protection efforts, even noble efforts are "vulnerable to goal substitution and other human traits, including aggressiveness, dogmatism, and worse"[28] One example of this kind of behavior is provided by the Fish and Wildlife Service in its efforts to reintroduce wolves to Yellowstone. According to the U.S. Fish and Wildlife Service, "the goal of 10 breeding pairs in each of three recovery areas was established after extensive literature review and consultation with a number of U.S. and Canadian biologists/wolf researchers."[29] My colleague Charles Kay and I wanted to know what literature was reviewed and which wolf experts were consulted, but the agency published none of that information. In order to find out that information, as well as how the government analysts actually arrived at these figures, if the figures are realistic, and whether they meet ESA requirements, he filed a Freedom of Information Act request with the U.S. Fish and Wildlife Service. The agency replied that it had "not contracted or undertaken any studies which deal with minimum viable populations of the Northern Rocky Mountain wolf."

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[28]T.W. Clark and R.D. Brunner, "Making Partnerships Work in Endangered Species Conservation," *Endangered Species Update*, 13(9), 1996, p. 1. See also D.J. Mattson and J.J. Craighead, "The Yellowstone Grizzly Bear Program: Uncertain Information, Uncertain Policy," in T.W. Clark, R.P. Reading and A.L. Clarke, eds., *Endangered Species Recovery: Finding the Lessons, Improving the Process* (Washington: Island Press, 1994), pp. 101-130.

[29]U.S. Fish and Wildlife Service, *Northern Rocky Mountain Wolf Recovery Plan* (Denver, CO: U.S. Fish and Wildlife Service, 1987), p. 19.

It further said, "There are no records in the files of our Denver Regional Office or the Cheyenne Fish and Wildlife Enhancement Office referencing any specific materials used in determining recovery numbers for the Northern Rocky Mountain wolf." When Charles Kay brought this to the attention of conservation biologist Michael Soulé, he said, "My guess is that the 10-pack number is more a political than a biological threshold."

This may not be a typical story, but it is indicative of the kinds of actions that are possible under the current set of legal rules for managing endangered species. Agency personnel have little incentive to consider costs, tradeoffs or values. They have incentives to expand their jurisdiction over private lands but do not bear any of the costs of their actions. There is little wonder that landowners destroy habitat preemptively and help their neighbors learn to do the same.[30]

Alternatives to Property Being Conscripted to National Zoological Use

Is it possible to create an endangered species act that protects species and property rights? It may be, but only by creating legal rules that follow advice from Aldo Leopold's conclusion to his classic essay, "Conservation Economics:"

> This paper forecasts that conservation will ultimately boil down to rewarding the private landowner who conserves the public interest. It asserts the new premise that if he fails to do so, his neighbors must ultimately pay the bill. It pleads that our jurists and economists anticipate the need for workable vehicles to carry that reward. It challenges the efficacy of single-track laws, and the economy of buying wrecks instead of preventing them. It advances all these things, not with any illusion that they are truth, but out of a profound conviction that the public is at last ready to do something about the land problem, and that we are offering it twenty competing answers instead of one. Perhaps the cerebration induced by a blanket challenge may still enable us to grasp our opportunity.[31]

The following proposals respond to Leopold's request for "workable vehicles," to avoid "single-track laws," to prevent wrecks rather than buy them, and to offer "twenty competing answers instead of one."

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[30]R. Stroup, "Endangered Species," in *Conservative Conservation: Policy Proposals for the New Century*, Donald Leal, ed., (Bozeman, MT: PERC, 2001), p. 7.

[31]S.L. Flader and J.B. Callicott, eds., *The River of the Mother of God and other essays by Aldo Leopold* (Madison, WI: University of Wisconsin Press, 1991), p. 202.

Rental Contracts

One proposal for changing incentives for landowners and regulators is to use rental contracts as the primary means of protecting species.[32] It is an idea based on the federal government's experience with the Conservation Reserve program, under which farmers and ranchers are compensated for taking land out of production. At least two types of conservation contracts would be possible. One would be a production contract under which landowners would agree to increase the number of protected species on their property. The other would be a conservation contract under which landowners would give up or postpone development and potentially undertake conservation actions. Rental payments would be based on the landowners' success at meeting the conditions of the contracts.

The authors of this proposal suggest the contracts would be with the Department of the Interior through the Fish and Wildlife Service and could be tailored to meet the specific conditions of each property, the species it harbored, and the landowner's interests. They also claim that rental contracts would change landowner and regulator incentives. By compensating landowners, the contracts would end the incentive to preemptively destroy habitat. They would also encourage land management undertaken with the needs of endangered species in mind.

Incentives for agency personnel would also be changed. With a budget for conservation contracts, regulators would "shop for least-cost providers of habitat and seek out and reward lower-cost techniques to enhance habitat and conserve species."[33] As part of the rental contract, the agency could also provide technical assistance and advice about how to better manage lands for species and production. Agency personnel would be far more likely to be viewed as partners in conservation than they are now.

The Texas Parks and Wildlife Department (TPWD) has initiated a form of rental contracts under their "Landowner Incentive Program."[34] Landowners voluntarily enter into a performance contract with TPWD that contains measurable actions. The contract is limited to a set number of years, biologists are allowed on the property to monitor progress, and landowners are paid based on whether they meet the contract's objectives. The program is too new for there to be any independent evaluations of its success, but it is an experiment in changing incentives that could serve as a model for national experiments.

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[32]T.R. Bourland and R.L. Stroup, "Rent Payments as Incentives," *Journal of Forestry*, April, 1996, pp. 18-21.

[33]Stroup, "Endangered Species," 2001, *op. cit.*, p. 7.

[34]Accessed at http://www.state.tx.us/southtx_plain/tg/incentive_programs.htm.

Compensation Funds

Defenders of Wildlife, an environmental group, created one of the most innovative ongoing programs promoting endangered species protection. Officials at Defenders of Wildlife recognized that ranchers end up paying for wolves because the wolves occasionally kill livestock. Beginning in 1987, they decided to create a wolf compensation trust fund that would pay ranchers for their losses. The fund works like any insurance system: A rancher discovers a cow has been killed and suspects the culprit is a wolf. He calls a local veterinarian to verify that the cow was killed by wolf and submits a claim to Defenders. If the veterinarian validates the claim, the rancher is reimbursed for the loss.

Defenders of Wildlife claims the fund "helps to eliminate a major factor in political opposition to wolf recovery and to shift the economic burden of wolf recovery from livestock producers to those who support wolf reintroduction." The organization also offers the compensation fund as "a model of the incentives that might be offered to private landowners for supporting threatened and endangered species." In his decision that cleared the way for wolf reintroduction, Judge William Downes of the U.S. District Court in Cheyenne, Wyoming praised Defenders of Wildlife for "putting its money where its mouth is."[35] The money commitment by Defenders of Wildlife has been fairly substantial. From 1987 through October 2001, the fund paid $194,796 to 173 ranchers for wolves having killed 239 cattle, 530 sheep, and 25 other animals.[36]

More private and public compensation funds could be created to keep endangered species from being a liability to landowners. Payments could range from direct costs such as wolf predation to reimbursement for loss of economic value from having an endangered species on your land. But such funds do not appeal to regulators if the government has the power to impose regulatory costs without compensation. Compensation funds would get a major boost if the courts were to rule more strongly in defense of the Fifth Amendment, and force government to pay for what it takes.

Conservation Concessions

Another example of being reimbursed for losses from endangered species is the concept of conservation concessions or easements. This is an idea pioneered by Conservation International[37] for use in developing countries, but it is also applicable in the United States,

[35]Accessed at http://www.defenders.org/wolfcomp.html.

[36]Accessed at http://www.defenders.org/wildlife/wolf/wolfcomp.pdf.

[37]Accessed at http://www.cabs.conservation.org/xp/CABS/research/economics/concessions.xml.

especially in the southeastern United States where private individuals own about two-thirds of the commercial forests. A conservation concession is like a timber concession where a timber company pays an owner for the right to harvest timber. In this case, however, rather than log the timber, the concessionaire leaves it standing but pays the owner for the value of the timber. Conservation International has purchased concessions from the governments of several countries. Richard Rice, Conservation International's chief economist and the originator of the conservation concession idea reports, "[I]n Bolivia we conserved an area the size of Rhode Island for half the price of a house in my neighborhood."[38]

Conservation concessions have been employed on *public* lands in the United States. In 1998, a coalition of five environmental groups in the Pacific Northwest purchased the equivalent of a conservation easement in Loomis State Forest in north-central Washington. They purchased the logging rights to 24,000 acres, the only unroaded area in the 2 million acre forest. The Loomis is a high-elevation lodge-pole forest that is home to grizzlies, fishers, and Canadian lynx. Washington's Common School Trust, which uses the income from timber harvest for the state's public school system, manages the Loomis. The purchasers will pay the trust what they would have received had the site been logged and pay for an additional harvestable tract elsewhere in the state. In 1996, the Forest Guardians of New Mexico outbid a rancher for a 644-acre degraded, riparian-area grazing lease. Instead of managing for cows, they managed for wildlife by planting willows and other vegetation, and they removed the livestock.[39]

The closest program to conservation concessions on *private* lands in the United States are the conservation easements obtained by various land trusts across the country. One example is the Montana Land Reliance, a private, nonprofit land trust that attempts to provide permanent protection of ecologically important and scenic lands in Montana. They purchase conservation easements or have them donated. These easements preclude subdivision, commercial development and other activities.

Conclusion

This essay began by asking three questions: (1) how do people react to standing, according to the law, "in the same position as a poacher taking aim at a whooping crane;" (2) is the ESA an effective way to protect species; and (3) are there property-rights based alternatives that will better protect species? The answer to the first question is clear. People undertake preemptive habitat destruction and encourage their neighbors to do likewise. The ESA encourages habitat destruction and animosity towards regulators. In some cases the animosity

[38]W. W. Gibbs, "On the Termination of Species," *Scientific American*, Vol 285/5, 2001, p. 49.

[39]M. Brown and J.S. Shaw, "Paying to Prevent Logging Is Breakthrough for Environmentalists," *The News Tribune*, Tacoma, WA, August 13, 1998.

is deep and frightening. When my colleague, Charles Kay, published an article in a popular magazine questioning the science behind wolf reintroduction[40], I received a letter from the Fish and Wildlife Service official directing reintroduction efforts. He claimed that the article would inflame emotions to such an extent that his agents' lives could be threatened. The Defenders of Wildlife wolf compensation fund may have defused that animosity, but the federal agents in Idaho, Montana, and Wyoming were clearly worried about actions that might be taken against them.

The answer to the question about the efficacy of the ESA is unclear. For many endangered and threatened species, the ESA may be slowing the slide toward extinction. Given the incentives the ESA creates for landowners, however, it may be hastening extinction for many species. It is clear that the ESA creates negative incentives for landowners and perverse incentives for government regulators.

The answer to the question about alternatives is good news. There appear to be several effective alternatives to the "single-track" ESA, as Aldo Leopold might have called it. But implementing any of these alternatives in a systematic and widely applied manner will require that landowner compensation and incentives be adopted as guiding principles. Unfortunately, ESA-based regulations that reduce property values do not qualify as Fifth Amendment takings under the Court's stringent rules. Nevertheless, as Leopold explained nearly seventy years ago, "conservation will ultimately boil down to rewarding the private landowner who conserves the public interest." The ESA punishes landowners who conserve the public interest. No claims about the value of biodiversity or moralizing about "the diversity of life" will change that basic fact.[41] Only an enlightened amendment of the ESA or a major shift in the Court's interpretation can remedy the problem.

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[40]C. Kay, "Wolves in the West: What the Government Does Not Want You to Know About Wolf Recovery," *Peterson's Hunting Magazine*, Petersen Publishing Co., August 1993.

[41]For a relatively comprehensive discussion of biological values and ethics, see E.O. Wilson, *The Diversity of Life* (New York: W.W. Norton & Company, 1992). One of the reviews of the hardback edition inserted at the beginning of the paperback edition says, "The final chapter offers nothing less than a new religion, the Environmental Ethic…[which] sees us as one among many species, with our only special responsibility being to respect and conserve the biological riches we have inherited."

About The Author
Randy T. Simmons

Randy T. Simmons is a political scientist who emphasizes the importance of economic reasoning to better understand public policy. He believes the study of politics cannot be separated from the study of markets. Simmons uses this framework to evaluate environmental and natural resource policies. The real challenge of the social process, as he sees it, is to design institutions that have outcomes that closely represent the wishes of individuals. He believes that markets are often the best way to achieve this objective when they are insulated from political influence.

Simmons current research focuses on the Endangered Species Act. He stresses that threatened and endangered species are not simply a biological problem but a social problem, since the threat to their existence is a consequence of economic and political processes. Unfortunately, the solutions presented in the Endangered Species Act have been both costly and ineffective. He believes that positive incentives are more effective than penalties. Instead of creating a burden for private property owners, Simmons proposes measures to reward owners who conserve species and habitat. He also favors decentralizing and depoliticizing conservation programs, because twenty competing answers are better than one, especially when no one knows which is the right answer. He argues this case in his forthcoming book Political Ecology: Politics, *Economics and the Endangered Species Act.*

His other books include *Beyond Politics: Markets, Welfare and the Failure of Bureaucracy,* a primer on public choice economics co-authored with William Mitchell, and *The Political Economy of Customs and Culture: Informal Solutions to the Commons Problems*, co-edited with Terry Anderson. Simmons has also written widely on the conservation of African elephants.

Simmons is above all a teacher, and many of his students have gone on to have key roles as congressional and executive-branch staff members in Washington, D.C.

Simmons received his Ph.D. in political science from the University of Oregon in 1980. He is currently the chairman of the political science department at Utah State University, where he has been honored three times by the College of Humanities, Arts, and Social Sciences as researcher of the year. Also at Utah State University, he is the director of the Institute of Political Economy. Simmons is a senior associate with the Political Economy Research Center (PERC) in Bozeman, MT. Because of his knowledge of the political scene, Simmons oversees PERC's congressional staff briefings. He is also a senior scholar with the Competitive Enterprise Institute in Washington, D.C.

He makes his home in Providence, Utah, where he serves on the city council and, together with his students, developed a guide for communities to contract out (that is, privatize) local services.

ABOUT IRET

IRET was founded in 1977 as a 501(c)(3) public policy research organization dedicated to the belief that constructive, free-market economic policies are essential for the nation's economic progress. To this end, IRET conducts research and analysis of the economic effects of tax, budget, and regulatory public policy initiatives. IRET is a leader in offering guidance to policy makers regarding fundamental tax reform that would eliminate the bias against saving and investment in the current tax system, including elimination of the estate tax, taxation of capital gains, and the double taxation of corporate income. IRET is also researching ways to replace Social Security with personal saving for retirement.

IRET has a reputation as a no nonsense resource for policy makers and opinion leaders. IRET relies on contributions from individuals, foundations, and corporations to perform its work. It accepts no government funding. IRET is the leading public policy institute in Washington focusing realistically on the growth aspects and economic consequences of federal policy changes.

IRET's resident and contributing economists prepare books, studies, bulletins, and Congressional advisories for publication and distribution to the Congress, the media, and the public. IRET scholars testify at Congressional hearings and consult with Members of Congress on legislation and economic issues, write opinion pieces for journals and newspapers, make radio and television appearances, and speak at conferences on economics and public policy.

IRET's late founder, Norman B. Ture, was a distinguished tax advisor to Congress and served as Under Secretary of the Treasury for Economic Affairs in the Reagan Administration. Dr. Ture played a central role in the development of the Economic Recovery Tax Act of 1981. IRET's current President and Executive Director is Stephen J. Entin. Mr. Entin is a recognized expert on taxation and Social Security. He was Deputy Assistant Secretary for Economic Policy at the Treasury Department in the Reagan Administration, and was instrumental in the development of the 1981 tax cuts, in particular, the "tax indexing" provision that keeps tax rates from rising due to inflation. Mr. Entin represented the Treasury Department in the preparation of the Annual Reports of the Board of Trustees of the Social Security System, and conducted research into the long run outlook for the system. He advised the National Commission on Economic Growth and Tax Reform (the Kemp Commission), assisted in the drafting of the Commission's report, and was the author of several of its support documents. Prior to joining Treasury, Mr. Entin was a staff economist with the Joint Economic Committee of the Congress, where he developed legislation for tax rate reduction (the Kemp-Roth bill) and incentives to encourage saving. Mr. Entin is a graduate of Dartmouth College and received his graduate training in economics at the University of Chicago.