

PROPERTY-RIGHTS AND ENDANGERED SPECIES

HOLMES ROLSTON, III*

Human property rights have been well analyzed in our legal and moral traditions, but human duties to, or concerning, endangered species are novel and cannot be fully stated in any existing moral or legal system. Disputes about property go back several millennia; the Endangered Species Act of 1973 is only a decade and a half old. The "adequate concern and conservation"¹ that Congress makes imperative in that Act lies outside the traditional coordinates of legal property rights; indeed, it ultimately lies outside the scope of classical ethical theory. Superficially, the Act may seem another piece of natural resource law, analogous to environmental legislation about clean air, soil, water, or timber and range management. At depth, the Act is visionary, and implementing it is forcing seminal rethinking in both law and ethics. We will probe that vision by analysis in a diagnostic area, revealing a tension between respect for life at the species level and respect for property.

Sometimes landowners wish to protect endangered plant species. When Harold and Kathleen Wacker bought, as an investment, a 320 acre ranch in the adobe badlands country east of Montrose, Colorado, they had never heard of *Eriogonum pelinophilum*. However, they learned that approximately 35 acres of their property contains one of the largest and highest quality populations of this wild buckwheat, a federally endangered species endemic to the Mancos Shale Formation of Montrose and Delta Counties in western Colorado. Impressed with the rare plant, they agreed to grant the Nature Conservancy a five year management lease.²

Other landowners, finding a conflict between their preferred uses and preservation, will think an endangered species on their land a misfortune. The San Diego mesa mint (*Pogogyne abramsii*), a federally endangered species, is a tiny annual mint once common but now

* Professor of Philosophy, Colorado State University. The author thanks Linda McMahan, Faith Campbell, Bruce MacBryde, Kathryn Kohm, Ellen Paul, Mark Sagoff, Stephen Tan, and Paul Opler for critical comments.

1. Endangered Species Act of 1973, Pub. L. No. 93-205 § 2(a)(1), 87 Stat. 884 (codified as amended in scattered sections 16 U.S.C and 7 U.S.C. § 136 (1982 & Supp. 1984)).

2. *Wacker Family Invests in Ranch*, THE NATURE CONSERVANCY NEWS FOR THE COLORADO CHAPTER, Autumn 1989, at 2.

known in only three populations. One population on California land being developed by a private developer was deliberately destroyed "to ensure that subsequent requests for federal construction grants would not be delayed."³ Indeed, a botanist with the U.S. Fish and Wildlife Service monitoring the status of such plants has stated, "Populations of several candidate endangered plants on private land have been intentionally destroyed in the last few years."⁴

Landowners may understandably be unenthusiastic about a few rare plants obstructing their desire to enjoy or turn a profit on their land. It may seem almost comic to ask whether there might be any moral or legal obligation that transcends their property rights, whether odd plants can thwart their higher and better uses of the land. The plants, though rare, will likely have been growing on the land for the last several thousand years. They are likely an adapted fit, right for life, right where they are. The landowner will perhaps have been there a decade or two. Does the landowner have a right, moral or legal, to extirpate them?

This question sets property rights not simply against the Endangered Species Act, but also against evolutionary natural history. Property rights are a cultural phenomenon, embodied in civic laws. Evolutionary history is a natural phenomenon, following natural laws, the speciating processes of which these species are products. So the question brings human cultural goods—in this case, land development, protected by property rights—up against values carried by spontaneous nature, here associated with species formed independently of the human presence and now enjoyed by humans who desire to protect them. In this dialectic of nature and culture, law and ethics are evolving.

The Endangered Species Act is often implemented as prohibitive policy, telling people what they cannot do, and such law is unlikely to succeed unless we adequately interpret what is being affirmed with the prohibitions. The Act seeks to protect certain "values" that it finds are carried by endangered species,⁵ and since these are not the usual utilities associated with natural resources, protecting them may seem implausible when that protection prejudices property rights. In apparent upshot, plants seem to trump people. But the real upshot is that a positive respect for life prohibits certain uses of property. If we unfold

3. Carlton, *Property Rights and Incentives in the Preservation of Species*, in *THE PRESERVATION OF SPECIES: THE VALUE OF BIOLOGICAL DIVERSITY* 261 (B. Norton ed. 1986).

4. MacBryde, *Why Are So Few Endangered Plants Protected?*, 59 *AM. HORTICULTURIST*, Oct./Nov. 1980, at 29, 33.

5. 16 U.S.C. § 1531 (a) (1988). These values, as defended in the Act, are discussed *infra*, at section III.

the logic of the Act, and couple it with an appropriate respect for species in natural history, we realize that what is happening on their land is, and ought to be, quite imperfectly owned by landholders.

We will develop this thesis by a series of contrasts that spiral around ways of understanding events taking place on such property, on the landscape. We ask in Section I whether disputes over its use are taking property or taking species, in Section II about who owns the animal and plant life existing there, in Section III about the economic and noneconomic values carried on the land. In Section IV we ask whether loss or gain is involved in development and conservation. In this way we climb steadily toward the higher view of property discussed in Section V, one that sees not only a respect for property but a respect for life on the land. Finally, in Section VI, we come to view the owner as a trustee. We are developing, as lawyers might phrase it, the concept of imperfect property rights. But we are trying to envision, as an environmental philosopher would prefer to put it, a more perfect land ethic.

I. TAKING PROPERTY VERSUS TAKING SPECIES

The fifth amendment to the U.S. Constitution prohibits the government from "taking" private property unless it is for public use and without making just compensation.⁶ In general, such a cause must be a public use that outweighs the disadvantage to the unwilling landowner, from whom land or rights on it may be taken, provided that there is just compensation. The distribution of benefits and costs will then involve an unwilling landowner, but at least just compensation will distribute benefits and costs equitably.⁷

The word "take" also occurs in a newer legal context. In the Endangered Species Act and its amendments, there are frequent prohibitions against "taking" animals and, without quite using the word, "taking" plants that belong to listed species, because this is tantamount to taking the species. The double question about "taking" that arises is: do endangered species prohibitions against taking animals and plants on private land also involve a taking of property that requires just compensation?

The two uses of "take" in their different contexts have a common origin. The word comes from a legal tradition where one "takes pos-

6. "[N]or shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.

7. This summary belies the complexity of deciding whether compensation is just, the amounts of benefits and costs, how they are distributed, and how to figure in the ancillary, often noneconomic, losses and benefits that result from the seizure of property.

session" of property. Such legally held property is held with a bundle of property rights, and not even government can "take" such property away without appropriate cause and compensation. In a parallel use, wildlife is free and belongs to no one until a licensed hunter "takes" or captures it, whereupon the animal becomes the hunter's possession.⁸ The taking of individual animals, where they are endangered, dangerously contributes to taking the species. Applied to animals in the original Act, taking has subsequently been increasingly applied to plants.⁹ The taken animals and plants are not necessarily killed; they may be captured for commerce, souvenirs, or a variety of reasons, but they are removed from their wild status, and thereby the vigor of the species is imperiled. Mixed with ownership, the word becomes a euphemism for taking life, for killing, capturing, or uprooting an animal or plant and simultaneously taking the species in instances.

In the decade and a half since the Act was first passed, the meaning and scope of "take" has been explored, fought over, and gradually enlarged. In the 1973 Act, "[t]he term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."¹⁰ The definition has animals in focus. Elaborating, the Act permits certain kinds of takings that do not jeopardize the species. It notes that taking habitat may be tantamount to taking species, a vital and controversial expansion of the meaning of "take." The 1988 amendments regarding the protection of plants made it unlawful to "remove and reduce to possession" or to "maliciously damage or destroy" listed plants on lands under federal jurisdiction, and "to remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any State."¹¹ In a suggested model plant act for states, "take" means "pick, collect, cut, transplant, uproot, dig, remove, damage, destroy, trample, kill or otherwise disturb," but this language has only partially found its way into state legislation.¹²

Congress has been progressively increasing the penalties against those who take plants on private property, and the 1988 law moves further in this direction than ever before. Actually, we should note in passing that the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere asserted, half a century ago, that the species of fauna and flora listed in its Annex "shall be protected as

8. This concept is commonly referred to as the doctrine of *ferae naturae*, which precludes actual ownership of wildlife until capture.

9. Note, *Legal Protection for Rare Plants*, 29 AM. U.L. REV. 515, 562-66 (1980).

10. 16 U.S.C. §§ 1532(19) (1988).

11. Endangered Species Act Amendments of 1988, 16 U.S.C. § 1538(2)(B) (1988).

12. Fitzgerald, *The State of the States in Plant Protection*, 10 GARDEN, Sept./Oct. 1986, at 2, 3.

completely as possible, and thier [sic] hunting, killing, capturing, or taking, shall be allowed only with the permission of the appropriate government authorities in the country," presumably without regard as to whether they are taken on public or private land.¹³ The Annex is a flexible list and the United States has not named any plants to the list, though other nations have. The Convention has largely been ignored, however, especially in domestic law.

The federal government can, if it pleases and as it does in Section 7 of the Act, prohibit *its agencies* from "taking" animal or plant species wherever these occur, no matter whether these agencies operate on public or private lands.¹⁴ It perhaps can do this abroad as well as at home. But can the federal government prohibit a *private landowner* from taking plants on his or her own land, or prevent a citizen from taking, with a landowner's consent, plants on the private lands of others? Congress has deferred the question to state law, perhaps pragmatically or perhaps since property rights and regulations are traditionally thought to be more appropriately addressed at state than federal levels.

State laws vary widely; some states do indeed prohibit anyone, landowner or not, from taking endangered plants on private property without a state permit. Most states require of nonlandowners a permit to collect or destroy, but allow landowners to act as they please.¹⁵ At the same time, Congress has backed state laws that do prohibit such taking with a federal penalty, indicating that state governments can legitimately have such power, and that the federal government will support it. Increasingly, it seems, Congress is concerned about taking plants on private as well as public lands. Also, where species have been taken but restoration is possible. Congress, in the 1988 amendments, required developing recovery plans without regard to taxonomic classification, indicating a concern for plants equal to that for animals.¹⁶

Hence we are confronted with a double use of "take"—where the "taking" of life and species is set against the "taking" of property—and in struggling toward resolution, our moral and legal convictions about the institution of private property and its economic value are evolving in an encounter with the biology and ecology of endangered species.

13. Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, *opened for signature* Oct. 12, 1940, 56 Stat 1354, 1366, T.S. No. 981, 161 U.N.T.S. 193. The Convention was sponsored by the Pan American Union and has been signed by twenty-one nations.

14. 16 U.S.C. § 1536 (1988).

15. Fitzgerald, *supra* note 12, at 5.

16. Endangered Species Act Amendments of 1988, 16 U.S.C. § 1533(b)(1), (2).

In ethical and legal thought, there are inalienable, strong rights, such as the right to life, liberty, and the pursuit of happiness. Infringing these rights assaults a person's dignity or security. But property rights belong to the class of weak rights and hence can be amended to serve the common good.¹⁷ Property rights have a certain "strength" in the sense that they are well developed legally, being much fought over. But they are nevertheless "weak" in a sense evidenced in just this long legislative tradition. Every state regulates the ways in which property owners may develop their land, and the more special and ecologically sensitive the land (a floodplain, a coastal zone, a wetland, open space, a scenic or historically significant place, for example), the tighter the regulations. Few persons own real estate without zoning and other ordinances that restrict the ways in which that particular parcel of real estate can be used, uses which may be permitted elsewhere, or which may have once been permitted there.¹⁸

Such regulations do not violate a person's dignity or security or even a person's liberty in any deep sense (as do violating free speech, establishing religion, disfranchising, denying a jury trial, imposing unjust imprisonment). The liberties that such regulations constrain (grazing cattle, filling the wetland, blocking a view, or building a prohibited kind of house) are lesser liberties that can be regulated to protect public goods by taking account of the spillover values from land use, many of which are non-market, non-real-estate kinds of values. The consequences of property use are not confined to that piece of real estate alone. Liberty on one's property is no license to harm those utilities of others that lie off of it. The right to liberty, if strong elsewhere, is weak here.

So there is no contesting the state's power to regulate land use, but we can contest its extent. Such regulation could amount to confiscating the private land for public use, for which the public ought to pay. Property rights, though weak, are still rights, and cannot be taken away without just compensation.

17. See R. DWORKIN, *TAKING RIGHTS SERIOUSLY* 266-78 (1977). By some accounts the right to property is as robust as any other right.

18. Those who maintain that property rights are not weak but are as strong as any other rights may concede the history and fact of regulation but lament it as evidence that governments have long overstepped their role. Further, all rights, strong or weak, are constrained by duties, enforceable in law, not to harm the like rights of others, and duties of this character are proper.

Nevertheless, constitutionally, public use does seem to warrant taking property (with just compensation), as it would not life or liberty. Property rights are regulated (often without compensation) with a view to preserving not simply the like property rights of others but a much larger array of public amenities (such as scenic vistas, wetlands, coastlines, wildlife, historical places, architectural character) and this provides some evidence that property rights have been—and we think ought to be—considered imperfect, that is, weak before larger goods of the community.

In general courts have been reluctant to construct a theory of property rights applicable to taking under the fifth amendment, preferring a pragmatic approach.¹⁹ Where government compels transfer of title, or physically invades the land, floods it, or forces the owner off, there is taking. But what about regulation? Regulation that constrains the owner's desires about the degree and kind of development in order to protect a public good is legitimate. If there is great public gain and only modest landowner loss, compensation is not required. But such regulation ought not to deprive the owner of all reasonable uses of his land, especially previously existing uses. Government can diminish value without compensation, but it cannot destroy all of its value for the owner. Above a certain threshold, compensation is required. Justice Holmes, in a famous dictum, wrote: "[W]hile property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking."²⁰ The "too far" theory, as can easily be imagined, proves a slippery slope.

More just and more logical is the "harm" theory. Government has police power, and police power, broadly conceived, is protection of the public against harm. If the public is gaining a good, government ought to compensate, but if government is protecting from harm, it can prohibit (and regulate accordingly) without compensation. People have a duty not to harm regardless, a duty that can be legally enforced. Courts may stop a landowner from "engaging in conduct which he ought, as a well-socialized adult, to have recognized as unduly harmful to others."²¹ This power agrees with a general moral rule that injunctions against malevolence are binding in a strong sense, whereas injunctions to benevolence are weaker. Positive rights to be helped are often optional in a way that negative rights not to be harmed are not. I must not injure a stranger who begs on the streets, under penalty of law; but no law requires that I benefit him with a handout.

Police power might seem an unlikely source for conservation biology. The very etymology of police (Greek: *polis*) contains the idea of town, an opposite of wild nature. Certainly the police ordinarily deal with humans, almost never with nature. But we must look further

19. Many commentators think that taking jurisprudence is inconsistently applied and theoretically in confusion. For an introduction to these issues oriented to environmental regulation, see Sax, *Takings, Private Property and Public Rights*, 81 *YALE L.J.* 149 (1971). See also R. EPSTEIN, *TAKINGS, PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN* (1985); E. PAUL, *PROPERTY RIGHTS AND EMINENT DOMAIN* (1987); B. ACKERMAN, *PRIVATE PROPERTY AND CONSTITUTION* (1977).

20. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922) (Holmes, J.). Epstein discusses recent cases, concluding that this is "the dominant line of opinion" and also noting that Justice Holmes in later correspondence regretted his language here. R. EPSTEIN, *supra* note 19, at 102, 63.

21. B. ACKERMANN, *supra* note 19, at 102.

into the expanded idea of police power, which is protection from harm. The etymology of *polis* contains the idea of community and its common good, the protection of which we sometimes must set against private interests when these private behaviors threaten others. When the law enjoins landowners not to take listed plants on their property, is government protecting against harm, under its police powers? Or, is the public gaining a good, taking property that requires compensation? As we begin to analyze that issue, perhaps we have been too hasty about what is involved in property ownership. We are assuming that landowners possess what they are prohibited from taking, the plants and animals on their land, That may not be so.

II. ANIMALS VERSUS PLANTS

The Endangered Species Act, people first think, is about grizzly bears and bald eagles, about charismatic megafauna. Such animals and birds move around. They live on the land, with dens and nests in particular places, but range over hundreds or thousands of square miles. In the case of big animals and migratory birds, it is easy to see that they do not belong to a local landowner, or even to a single state. They sometimes live on public land, sometimes on different tracts of private land. As a result, there is a long legal tradition that property holders do not own vertebrate wildlife. Even if such wildlife entirely resides on one owner's property, it might well move elsewhere. On the other hand, sedentary animals (barnacles and clams) may be thought to belong to property owners, although many of these creatures are marine, and ownership in marine waters has been complex.

State control of wildlife was long phrased as state ownership, but on many occasions the state seemed no more an owner than a local landowner. In a case involving migratory birds, Justice Holmes wrote,

The State as we have intimated founds its claim of exclusive authority upon an assertion of title to migratory birds,—an assertion that is embodied in statute. No doubt it is true that as between a State and its inhabitants the State may regulate the killing and sale of such birds, but it does not follow that its authority is exclusive of paramount powers. To put the claim of the State upon title is to lean upon a slender reed. Wild birds are not in the possession of anyone; and possession is the beginning of ownership. The whole foundation of the State's rights is the presence within their jurisdiction of birds that yesterday had not arrived, tomorrow may be in another State and in a week a thousand miles away.²²

So Justice Holmes, who believed that going "too far" with regulation

22. *Missouri v. Holland*, 252 U.S. 416, 434-35 (1920).

was taking property, also thought that claiming ownership of avian wildlife was going "too far" even by the state, much less the landowner.

State (as opposed to federal) ownership of wildlife was long regarded as established in an 1896 U.S. Supreme Court decision, *Geer v. Connecticut*,²³ but the federal government continued to regulate wildlife nevertheless, since much wildlife crossed state lines and much inhabited federal lands, and many hunters crossed state lines and hunted on federal lands. In a 1979 decision, *Hughes v. Oklahoma*,²⁴ the state ownership doctrine was rejected as the wrong way of characterizing wildlife, which should rather be regulated comparably to other natural resources. So, more recently, state ownership of wildlife has been subsumed under the states' (and federal) power to regulate all natural resources.

This trend has developed as an expanding public trust doctrine, an outgrowth of law that earliest applied to navigable waters.

The cornerstone of Environmental Law is the assertion that all of our national natural resource treasures are held in trust for the full benefit, use and enjoyment of all the people of the United States, not only of this generation but of those generations yet unborn, subject only to wise use by the current nominal titleholder. . . . The basic principle underlying the Trust Doctrine is that, "There are things which belong to no one, and the use of which is common to all."²⁵

Wildlife is a common good held in trust by the state for the benefit of the people. Hence, although the landowner does control access to his land, the state (as regulator, not owner) decides when any person can take deer and bobwhite, and who is licensed to do this. No great stretch of thought is required to conclude that all the animals, birds, stream fish, perhaps even the butterflies and the bees, all of which move about widely, are common goods that can be regulated by the state.

This legal tradition arose with regard to individual animals, but the protection of the species has figured into regulations covering both game and nongame species. If landowners do not own individual animals, a fortiori, they do not own species. If the government (at federal

23. 161 U.S. 519 (1896). The case examined "the nature of the property in game and the authority which the State had a right lawfully to exercise in relation thereto." *Id.* at 522. The majority opinion was that states have the right "to control and regulate the common property in game," *id.* at 528, which right was to be exercised "as a trust for the benefit of the people." *Id.* at 529.

24. 441 U.S. 322 (1979).

25. V. YANNAKONE, B. COHEN, & S. DAVISON, 1 ENVIRONMENTAL RIGHTS AND REMEDIES 11 (1972 & Supp. 1988) (citing *Geer v. Connecticut*, 161 U.S. 519, 526 (1896)).

or state levels) can regulate individual animals, a fortiori, it can regulate species. The prohibition of the Endangered Species Act against taking animals on private land, including invertebrates, has not been seriously challenged. In the fall of 1981, when some black-footed ferrets were discovered on private ranches near Meeteetse, Wyoming, the ranchers were legally obligated to protect them.²⁶

Further, the federal government can designate critical animal habitat on private land. No landowner can shoot the bald eagles that fly over his property—or cut the trees in which they nest. In compliance with the Endangered Species Act, in order to protect eighty bald eagle nesting sites, the Weyerhaeuser Company has set aside more than 900 acres in Washington and Oregon, which represents over \$9 million in unharvested timber.²⁷ Lest it be supposed that the bald eagle, the national symbol, is a unique and unusual public good, Weyerhaeuser has also, complying with the Act, set aside 155 acres in southern states to protect twenty-two colonies of the endangered red-cockaded woodpecker. These woodpeckers prefer to nest in prime timber, eighty-year-old pine forests, and the timber cycle has to be less than optimum to accommodate them. Weyerhaeuser claims costs of \$115,000 as a result.²⁸ Similarly, in eastern Virginia, Union Camp Corporation has set aside 200 acres of timber to maintain two birds, plus their annual young.²⁹ These set-asides prevent these landowners from using the land as they once intended, and cost them that opportunity; it does so lest they destroy, at the species level, eagles and woodpeckers that, though on the land, never belonged to them in the first place. The "taking" of opportunity is thus set against the "taking" of species.

The preceding actions protect animals and birds, but the Endangered Species Act, people soon discover, is also about the flora—pitcher plants and cacti. In the original 1973 Act, plants were already of concern; one could not engage in unrestricted interstate commerce in protected plants. Plants could be listed, regardless of where they occurred. But there was at first no prohibition against taking them, not even on public—much less private—lands. In 1982, Congress prohibited the private collecting of endangered plants on federal lands;

26. For the story and ranchers' reactions to an endangered species on private property, see T. CLARK, *CONSERVATION BIOLOGY OF THE BLACK-FOOTED FERRET* (1989).

27. *Endangered Species Act: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation and the Environment of the House Comm. on Merchant Marine and Fisheries*, 97th Cong., 2d Sess. 230-62 (1982).

28. *Id.*

29. Kale, *Some Firms Aware of Threatened Birds*, *Richmond (Virginia) Times Dispatch*, Oct. 9, 1986, at 1, col 1.

technically this prohibition did not prevent destroying them by logging, grazing, building dams, and so forth, so long as one was not collecting them.³⁰ The 1988 law makes it a violation maliciously and knowingly to damage endangered plants on federal land.³¹ That prevents vandalism, but may not require people to notice what their cows eat or whether their off-road vehicles crush protected plants. As earlier noted, the 1988 law also endorses state laws that prohibit disturbing and destroying plants. Also, critical plant habitat can be designated on private land.

Plants do not move around, at least single plants do not, though some plants spread their seeds on the wind and their burrs stick to animals that move among them. Rare plants move less than common ones, especially where they are adapted to edaphic niches. Traditionally, the trees and grass belong to the landowner. "Standing timber is real estate. It is a part of the realty the same as the soil from which it grows."³² Except for noxious weeds, disease carrying plants, and marijuana, the state has made few claims regulating flora on private land. Plants on public land can certainly be protected by federal and state law, since the government "owns" (more accurately, is responsible to the people for) those plants, but what about plants on private land?

The pine trees in a southern swamp belong to the land owner, but how about individual *Rhododendron chapmanii* plants, a listed species? Individual plants, we have thought, were elements of the property; but we face a new question when a few individual plants represent and constitute a natural kind. Ownership of a species has never been part of the explicit bundle of property rights. Indeed, does anyone own a species? This question remains tacit with wildlife, because landowners have not really owned the individual animals, much less the species. The question remains tacit with abundant plant forms, because cutting lodgepole pines or plowing up a field of blue-grass does not imperil these species.

But with rare plants, taking individuals is tantamount to taking the species, and the question comes into sharper focus. Until we answer the species ownership question, we cannot answer the question whether any property rights have been deprived. We may have to temper our concept of land ownership with an adequate concern for not only animal but also plant species and the values they carry.

30. Endangered Species Act Amendments of 1982, 16 U.S.C. § 1538 (1982).

31. Endangered Species Act Amendments of 1988, 16 U.S.C. § 1538(2)(B) (1988).

32. *Kerschensteiner v. Northern Mich. Land Co.*, 244 Mich. 403, 417, 221 N.W. 322, 327 (1928).

III ECONOMIC VERSUS NONECONOMIC VALUES

The right to property, we are arguing, is an imperfect one, and next we need to see how imperfectly the economic activity on a piece of real estate measures the full value of what is taking place on the landscape. This imperfect measure justifies the imperfect right. In the preceding section, we questioned whether landowners did in fact own fauna and flora at the species level. We continue now by contrasting the economic values of the land with the noneconomic values carried by species there. Although landowners may desire to do various things with or on their land, the currency of "taking" in the fifth amendment sense is economic: property with a market value is involved, and compensation is almost always in dollars, rarely in some equivalent market value. But what is the specie of value when a species is taken? Only when we identify the realms of value involved will we be prepared (in Section IV) to weigh benefits versus harms, to know whether there has been loss or gain.

We can start with the Endangered Species Act:

The Congress finds and declares that—(1) various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation; (2) other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction; (3) these species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational and scientific value to the Nation and its people³³

Note that "economic" does not appear in the list of values to be protected; to the contrary, it appears *counter* to the list. There is nothing at all here about protection being economically feasible. Rather, Congress evidently wanted to temper economic growth and development in order to prevent danger, threat, and extinction, and to protect aesthetic, ecological, educational, historical, recreational, and scientific values. In this concern for noneconomic and even nonhuman domains of value, we have extraordinary natural resource law. In the 1978 amendments to the Endangered Species Act, Congress provided for a multiagency committee that could balance economic interests with these other values but used great caution lest economic interests prevail easily.³⁴ That this committee was nicknamed the "God committee" indicates the high order of proof required for exemption. In

33. 16 U.S.C §1531(a)(1982).

34. Endangered Species Act Amendments of 1978, Pub. L. No. 95-632, sec. 3, § 7(e)(1), 92 Stat. 3751, 3753 (codified at 16 U.S.C §§ 1531-1536, 1538-1540, 1542 (1982)).

1982 amendments, reaffirmed in 1988 against a motion to repeal. Congress insisted that the decision to list or delist a species must be based on biological evidence rather than economic effect.³⁵

The current debates over the spotted owl in the old growth forests in the Pacific Northwest have brought us face to face with how the Endangered Species Act, more than any other environmental legislation, involves a conflict between these two value systems. Manuel Lujan, Jr., current Secretary of the Interior, has stated that he dislikes the prohibitions in the Act that forbid him from considering the economic impact of protecting endangered species.³⁶ Frank Dunkle, head of the U. S. Fish & Wildlife Service, has expressed a similar dislike.³⁷

Despite the careful language of the Act, the argument others most often give for conserving endangered species is that some of them—which ones we may not now know—will have economic uses in the future. In the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*,³⁸ Congress constrained trade to protect the increasing cultural and economic values of endangered plants and animals.³⁹ The International Union for the Conservation of Nature and Natural Resources has stated, "[T]he ultimate protection of nature, . . . and all its endangered forms of life, demands . . . an enlightened exploitation of its wild resources."⁴⁰ Conservationist Norman Myers concludes, "If species can prove their worth through their contributions to agriculture, technology and other down-to-earth activities, they can stake a strong claim to survival space in a crowded world."⁴¹ He urges "conserving our global stock."⁴² All that sounds like one kind of economic good gained and traded (in cases where there are prohibitions to the landowner) against another kind of economic good lost.

But Congress says nothing like this at all. It does not say: save those species that are economically valuable. Congress says: temper economic growth by saving species that have other kinds of values. The title is not *An Act Conserving our Global Stock*, or *An Act for the Enlightened Exploitation of Species*. The Act is a congressional resolution that the Nation and its people ought to live as compatibly as they can with the fauna and flora on their continent (and abroad), and its

35. Endangered Species Act Amendments of 1982, 16 U.S.C. § 1533(a)(1) (1988).

36. Radin, *Interior Chief Seeks Shifts in Species Law*, Boston Globe, Mar. 16, 1989, at 3, col. 1.

37. Morgan, *Dunkle: USFW Responds to Needs of the People*, The Kalispell (Montana) Daily Inter Lake, Apr. 14, 1988, at 4, col. 1.

38. *Opened for signature* Nov. 3, 1973, 27 U.S.T. 1087, T.I.A.S. No. 8249. *See also supra* note 13.

39. *Id.* at Preamble.

40. J. FISHER, N. SIMON, & J. VINCENT, WILDLIFE IN DANGER 19 (1969).

41. T. MYERS, THE SINKING ARK 56 (1979).

42. Myers, *Conserving Our Global Stock*, 21 ENVIRONMENT, Nov. 1979, at 25.

justification deplores the fact that we are not now doing so. It claims that what is good for the fauna and flora is good for the people. Anyone who on occasion asserts the contrary carries the burden of proof. Land as real estate, land for economic development, is only part of the fuller picture. Land is the scene of speciation, the habitat of species, carrying aesthetic, ecological, educational, historical, recreational, and scientific values for people. Working out this general principle will mean, at the level of particular cases, that somebody somewhere will have to temper their economic interests lest they endanger species and lest people lose these noneconomic values that the Act intends to protect. This tempering of economic values by noneconomic ones results in imperfect ownership. With that gestalt we can next turn more directly to what is taken from whom.

IV. LOSS VERSUS GAIN

In the title of the Act itself, the term "endangered" overshadows everything to follow. The first two opening clauses lament the irretrievable extinction of many species and the threatened loss of many more. Section 7, with its "no-jeopardy" clause, where nearly all the litigation has arisen, instructs all federal departments and agencies to take whatever action is necessary "to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitats of such species which is determined ... to be critical."⁴³ All this language suggests a perspective of harming, and we regularly use police power and "protective regulations"⁴⁴ against jeopardy, threat, danger, and destruction.

Well, it will be replied, although the terms are maleficent, humans are not in jeopardy; only the plants and animals are. In a noteworthy suit, the palila, a Hawaiian finch, is listed as though it is one of the plaintiffs.⁴⁵ Certainly the palila stands to be harmed. On a naturalistic reading of the Act, the loss of species is a bad thing in itself for which we need to develop an adequate concern. But on a humanistic reading of the Act, Congress does not care about extinction except as it concerns humans; only the humans who were plaintiffs along with the palila really have standing to sue. Species do not have standing in court, so injury to them cannot count. Only injury to humans counts,

43. Endangered Species Act of 1973, Pub. L. No. 93-205, § 7, 87 Stat 982. Amendments have modified the language to read, "not likely to jeopardize," Endangered Species Act Amendments of 1979, 16 U.S.C. § 1536(a)(2) (1988).

44. *Id.* at § 4(d), 87 Stat. at 888.

45. *Palila v. Hawaii Dep't of Land and Natural Resources*, 471 F. Supp. 85 (D. Haw. 1979), *aff'd*, 639 F.2d 495 (9th Cir. 1981).

and the landowners are injured in their property constraint. But how about the citizens? For humans, aesthetic, ecological, educational, historical, recreational, and scientific benefits are claimed, and all these benefits are something to be gained.

But the better gestalt is not gain but loss. Even though the loss of life is to animals and plants, there is danger of loss, threat of serious harm to humans who lose, too, when these animals and plants vanish. So the aesthetic, ecological, educational, historical, recreational, and scientific benefits, though not a matter of life and death, are a matter of danger and threat of loss. The Supreme Court found in the Act "repeated expressions of congressional concern over what it saw as the potentially enormous danger presented by the eradication of *any* endangered species"46 Interpreting the Act, the Court insisted "that Congress intended endangered species to be afforded the highest of priorities."<47 "The plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost."<48 That, incontrovertibly, is a perspective of threatened loss.

The Endangered Species Act sets untempered economic growth against adequate care and concern for aesthetic, ecological, educational, historical, recreational, and scientific values, but in so doing—where rare species occur on private property—it sets concentrated economic benefits to the single landowner against diffused general benefits (threatened to be lost) to citizens. The landowner, also a citizen, shares in these benefits, but gains only a soft set of benefits against heavy costs in opportunities foregone. The nation and its people enjoy the claimed benefits without cost, but the landowner, constrained in the right to hold and enjoy property, suffers economic loss. Thus Congress has acted to diminish the economic value of the landowner's property.

The benefits desired by the landowner are appreciable, immediate, apparent, typically economic and often quantifiable. The benefits to human beings as a whole are largely imprecise, softer, dispersed and delayed, typically noneconomic and nonquantifiable, though in the aggregate they might outweigh benefits lost by the landowner. Moreover, the landowner does own the land, which makes the case different from that of entrepreneurs who wish to turn a profit on public lands. It might seem that Congress is going "too far" to gain (or protect) soft goods for the many at a hard loss to the individual.

But notice that the Act does not say that one should constrain the

46. *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 186 (1978) (emphasis in original).

47. *Id.* at 174.

48. *Id.* at 184.

economic activities of the landowner in order to benefit everybody else economically. It does not say that the green pitcher plant (*Sarracenia oreophila*) found on International Paper Company's land should be saved by International in order that other Americans can gain medical, agricultural, and industrial benefits from it. If it did, compensation might be required. If governments are shifting economic benefits around, redistributing them within subpopulations—taking a business property in a rundown area to redevelop the inner city, taking from one business owner to rejuvenate economic activity downtown for all downtown businesses—then governments must compensate.

If governments limit economic benefits because these threaten harm to general, noneconomic values, then no compensation is required. People never had the right to do on their property what spills over and results in harm to other people. From this perspective, it is no longer plausible to hold that anything has been taken from the landowner that the landowner ever owned. Certainly the owner expected to put his or her land to some preferred, but now forbidden use, forbidden since it produces a harm that the owner did not foresee, but is that a taking? In the Devil's Hole Pupfish decision,⁴⁹ landowners were prevented, without compensation, from pumping water from wells on their own land because this practice lowered the water table and endangered the pupfish population on nearby public land. They had the right to pump water, but not if the pumping was tantamount to taking the species.

The Supreme Court of Wisconsin found that compensation was not required when a county ordinance prevented landowners from filling a wetland that was a critical natural feature. "[W]e have a restriction on the use of a citizens' [sic] property, not to secure a benefit for the public, but to prevent a harm from the change in the natural character of the citizens' [sic] property."⁵⁰ "[D]estroying the natural character of a swamp or a wetland so as to make that location available for human habitation [degrades] the ecological creation, [and] the new use, although of a more economical value to the owner, causes a harm to the general public."⁵¹ "The shoreland zoning ordinance preserves nature, the environment, and natural resources as they were created

49. In August of 1971 the U.S. Department of Justice initiated legal action to limit pumping from wells on nearby private land that affected the water level in Devil's Hole, located on public land. The district court permanently enjoined pumping that would lower the level of the pool below the point that was crucial for spawning, and the Ninth Circuit Court of Appeals affirmed. *United States v. Cappaert*, 375 F. Supp. 456 (D. Nev. 1974), *aff'd*, 508 F.2d 313 (9th Cir. 1974). The United States Supreme Court upheld the lower courts by unanimous decision in *Cappaert v. United States*, 426 U.S. 128 (1976).

50. *Just v. Marinette County*, 56 Wis. 2d 7, 16, 201 N.W.2d 761, 767 (1972).

51. *Id.* at 17, 201 N.W.2d at 768.

and to which the people have a present right."⁵² The Court recognized that the public had only recently realized the values in wetlands. Because the land was undeveloped and in its natural state, nothing on the land for which the landowners had labored was taken; their loss was of possibilities of development traded against public loss. The ordinance reduced the market value of the land, but that market value, a function of the regional economy, did not result from labors of the owners.⁵³

In a New Hampshire decision, the court found that "[c]ontrolling and restricting the filling of wetlands is clearly within the scope of the police power of the State [I]f the action of the State is a valid exercise of the police power proscribing activities that could harm the public, then there is no taking under the eminent domain clause."⁵⁴

The regulation did not deny to plaintiffs the current uses of their marshland but did prevent a major change in the marshland's essential natural character, a change which plaintiffs, for speculative profit, sought for a purpose unsuited to its natural state and injurious to the rights of others [The] plaintiffs' four acres were part of a valuable ecological asset of the seacoast area and . . . the proposed fill "would do irreparable damage to an already dangerously diminished and irreplaceable natural asset." . . . The proposed fill would be "bad for the marsh" and "for mankind."⁵⁵

Landowners will say that the things they want to do (like cut timber, build summer homes, fill swamps) have not hitherto been thought of as harming the public. To the contrary, they have been judged good things. The right to develop is one of the standard property rights; ninety-nine percent of property purchased is for the development that has been or can be placed there. But even if the landowner intends to do something worthwhile, threat of extinction or actual extinction results. Indirect and incremental harm is still harm, as can be seen in resulting aggregate. In the state of Hawaii, untempered development threatens more than 700 of the 2000-2500 plants endemic to the islands, at least one taxon in three, and by some estimates half the flora.⁵⁶ California, Florida, Oregon, Texas, Utah,

52. *Id.* at 23, 201 N.W.2d at 771.

53. However, if the regulation lowered the value of the land below what the owners had invested in it, then the owners lost resources once invested, and perhaps for which they had once labored. But with purchase, the owners risked the benefits of their labors as an investment in speculative development, which, alas, failed.

54. *Sibson v. State*, 115 N.H. 124, 336 A.2d 239 (1975). This case was overruled by *Burrows v. Keene*, 121 N.H. 590, 432 A.2d 15 (1981), which distinguished *Sibson* on the grounds that the land in *Sibson* was "special."

55. *Id.* at 124, 336 A.2d at 240.

56. McMahan & Walter, *Where the Rare Plants Are*, 2 NEWSLETTER OF THE CENTER FOR

Arizona, and Puerto Rico stand to lose plant species in the hundreds, and most states stand to lose more than a dozen.⁵⁷ Perhaps 3,000 species, subspecies, and botanical varieties are at risk out of 22,000 known in the United States, about one taxon in seven.⁵⁸

Landowners may say that whether there is gain or loss depends on who has recently shifted perceptions of values. The benefits carried by rare species are novel, nontraditional public benefits. People never before cared much about these rare plants. Remember that the Endangered Species Act is groundbreaking, asserting new benefits hitherto unrecognized and unclaimed. Perhaps Congress has authority to do this, and the public gains, but in fairness it ought to compensate the losers. Elsewhere, when government wants new goods for the public and must take private property to gain these, it must compensate. The Endangered Species Act does in fact provide for the purchase of critical habitat.

But another perspective recalls that species are not novel or non-traditional goods that pass with the land. To the contrary, they have been there on the landscape hundreds of thousands of years. If anyone is a newcomer on the scene, it is the landowner, now so vociferously claiming his absolute property rights. The economic values are recent and partial; the complete set of ecological values comes by evolutionary history. The perceived values may be changing, but it is still the development that introduces the danger. The nation, now a little over two centuries old, is coming to terms with the fauna and flora that have been inhabiting the landscape since the Pleistocene Period and before.⁵⁹ That coming to terms constrains property rights, recent on the world scene, and it constrains, still more recently, development that introduces new danger, without compensation required, because there is no taking of anything that was in fact previously owned.

Changing perceptions of value may now be realizing values that were long in place and accepted as natural givens. Environmental values are not simply in the eye of the beholder. Or in the recently changing tastes of citizens. When we lose air, water, soil quality, natu-

PLANT CONSERVATION, Summer 1987, at 6; Altevogt & MacBryde, *Endangered Plant Species*, in 1977 MCGRAW-HILL YEARBOOK OF SCIENCE AND TECHNOLOGY 81-91 (1977).

57. Altevogt & MacBryde, *supra* note 56.

58. *Id.*

59. See Rolston, *Duties to Endangered Species*, 35 BIOSCIENCE 718 (1985); H. ROLSTON, ENVIRONMENTAL ETHICS ch. 4 (1988). Extinction is a natural process, but anthropogenic extinction differs critically from natural extinction, not only in pace but in result. Natural extinction is a key to respeciation, but artificial extinction shuts down the speciating processes. Natural extinction typically occurs with transformation, either of the extinct line or related or competing lines. Artificial extinction is without issue. Humans generate and regenerate nothing; they only dead-end these lines. Anthropogenic extinction is a form of superkilling. See *infra* note 66 and accompanying text.

ral resources, when we lose ecosystem stability, we lose whether we are aware of these losses or not. We lose even if we think we do not. There was loss when the passenger pigeon became extinct, even though this loss was then perceived by few persons. Untempered economic development harms the public seriously because it extinguishes the processes and products of biological speciation. These biological processes are not newly adopted values; they are the oldest values of all. It is no part of landowners' rights to "take" this life; nor is the state "taking" something from the landowner when it insists so.

In fairness to the landowner, we must recognize that land ought to be taxed with a view to what use can be made of it, and if it cannot be developed, then it ought not be taxed as developable land. That means that parcels of land with listed endangered species on them may be put in special tax status, reflecting the degree to which the parcel coincides with the endangered habitat and the extent of use of the land still permitted. Various easements will need to be negotiated. If the ownership is imperfect, then taxation should be lessened. This scheme is consistent with the fact that some forty states have adopted tax incentives to give relief to owners of forest land, agricultural land, and open space land devoted to conservation purposes. Tax relief of this kind, conceptually, is a much better way to assist the landowner than to permit charitable "donations" of development rights, since the latter suggests that the landowner has the perfect right to develop, overriding the presence of endangered species on critical habitat, and that the landowner voluntarily contributes these rights. Likewise, when and if such land is purchased by the state, the sale price needs to reflect these constraints on development.

Where the landowner is put to actual expense (as opposed to development foregone) to protect species (building a fence around a colony of endangered plants), compensation may be in order. This will depend in part on the nature of the protection purchased (a fence to keep the owner's own cattle from eating the plants differs from a fence to keep curious citizens from "taking" them, though the fence may serve both purposes), but the landowner is now spending money to protect a good not his own.⁶⁰ Our effort throughout this article to get

60. Be cautious about apparently analogous cases concerning who should bear the cost of preserving historic landmarks. Endangered plant species ought to be preserved; but, strictly speaking, this requires no action at all on the part of any landowner. Let alone, left to nature, endangered species take care of themselves. If they do not and are going extinct naturally, neither landowner nor any other human has any duty to preserve them. Left alone, historic landmarks crumble. They are artifacts, do have proper owners, and do require upkeep. Who pays these costs is another issue.

Action required of the landowner with endangered species is nonaction, not harming them, but there may be things the landowner can and ought to do to prevent this harm (such as building a fence to keep his cattle away, or perhaps restoration to compensate for his prior encroachment). The

conceptually clear on these issues is not meant to deny that some pragmatism and compromise will be needed in particular situations.

Property rights were instituted and are continued (among other reasons) in order to protect individuals from harm; now we must institute law to protect individuals from harming species and in so doing harming other persons. John Locke asserts that the landowner's property rights give him no right to spoil or destroy—"the exceeding of the bounds of his just property not lying in the largeness of his possession, but in the perishing of anything uselessly in it"⁶¹ The landowner can make use of the commons but can take only "where there is enough and as good left in common for others."⁶² In the case of nonrenewable resources, one person's use may leave less for others, but land use can and ought to be renewable. Land can be left to others. Locke did not have species in mind, but his principle applies here. Species can and ought to be renewable resources; they are wealth on the land. When species perish, uselessly or not, this creates scarcity and as much and as good no longer remains for others. Alternately put, property rights to land ought to help us divide up the pie of natural resources, but extinction of species shrinks that pie—forever.

In the case of long-continuing, nonreplaceable goods, property rights should be rights to use, not to destroy, and this has often been reflected in law. I can buy real estate and build a home there. Perhaps I must destroy the native vegetation to build my home, but that does not destroy the possibility of replacing the former vegetation with like or other vegetation, nor do I destroy the possibility of other uses of the land subsequently. But I cannot poison the land so that no vegetation can ever again be grown there, nor can I pollute it with plutonium so that no one else can use it for ten thousand years. Nor can I, on my private forested land, cut timber in such way that, with the soil eroded and seeding stock gone, the forest cannot be regenerated.⁶³ I can destroy this generation of forest trees but not the capacity for regeneration of a forest there. I can buy a swampland, but can I destroy the rare swamp ecosystem? Or endemic species there?

V. RESPECT FOR LIFE VERSUS RESPECT FOR PROPERTY

We are beginning to see occasions on which protecting nature can

"ought" here implies nonharm and landowners ought to bear these negative costs, since they are harming what they do not own and what they have no right to harm. Landowners are not required to do anything positively to foster the welfare of the plants (fertilize them, water them, distribute their seeds to new locations). Recovery plans and their costs, if any, are the responsibility of the state.

61. J. LOCKE, TWO TREATISES OF CIVIL GOVERNMENT ch. 5, § 46 (1947).

62. *Id.* at § 27.

63. *State v. Dexter*, 32 Wash. 2d 551, 202 P.2d 906 (1949), *aff'd per curiam*, 338 U.S. 863 (1949).

be more important and more moral than protecting property. The kinds of values carried on the land demand, in the end, the perspective of natural history for understanding appropriate law. True, Congress does not often look after ecological, historical, and scientific values in nature. Nature does not run by act of Congress. But Congress in the 1973 Endangered Species Act laments the lack of adequate concern for these species that has resulted over evolutionary time; it worries about irretrievable loss, because not even an act of Congress can remake a species. An act of Congress might save a species; Congress can resolve to let natural history continue. Making such law reasonable may involve our reeducation about what a species is, about what humans are doing to species. Where land use is involved, this reevaluation will involve distinguishing between benefits to individuals, typically sentient and usually persons, the traditional focus of Western ethics and law, and respect for life at the species level.

Paleontologist G. G. Simpson claims, "An evolutionary species is a lineage (an ancestral-descendant sequence of populations) evolving separately from others and with its own unitary evolutionary role and tendencies."⁶⁴ Joel Cracraft insists that species are "discrete entities in time as well as space."⁶⁵ What the nation and its landowners want to respect are dynamic life forms, biological vitality that persists genetically over thousands, even millions of years, overleaping short-lived individuals.

An ethic about species sees that the species is a bigger event than the individual animal or plant, although species are always exemplified in individuals. This level is more appropriate for moral and legal concern since the species is a more comprehensive survival unit than the organism. What survives for a few months, years, decades (rarely centuries) is the individual; what survives for millennia is the kind. Rivers are an example from traditional law of that to which a property owner has a limited right, because, though the river is partly on one's own land, it flows across many other properties. Species are—to put it symbolically—part of a river of life, to which a landowner has a quite limited right, because speciation flows over land for millennia.

When a rhododendron dies, another one replaces it. But when *Rhododendron chapmanii* goes extinct, the species terminates forever. Death of a token differs radically from death of a type. Extinction shuts down the generative processes, a kind of superkilling. It stops

64. G. SIMPSON, PRINCIPLES OF ANIMAL TAXONOMY 153 (1961). The definition is endorsed for plants in V. GRANT, PLANT SPECIATION 83 (2d ed. 1981).

65. N. ELDRIDGE & J. CRACRAFT, PHYLOGENETIC PATTERNS AND THE EVOLUTIONARY PROCESS 92 n. 1 (1980).

the flow of life. This kills forms (*species*) beyond individuals. This kills "essences" beyond "existences," the "soul" as well as the "body." This kills collectively, not just distributively. There is not just death, there is no more birth. To kill a particular organism is to stop a life of perhaps a few years, while other lives of such kind continue unabated, and the possibilities for the future are unaffected; to superkill a particular species is to shut down a story of millennia, and leave no future possibilities. One generation stops future generations. In this evolutionary perspective, the sense of harm takes on much greater depth.⁶⁶

What is wrong with human-caused extinction is not just the loss of human resources, but the loss of biological sources. Certainly we care about values to the nation and its people, but we should also care about biological processes that take place independently of human preferences. Previously, humans had less power to cause extinctions and less knowledge about what they were inadvertently doing. But today humans (certainly those who support, authorize, and implement the Endangered Species Act) have more understanding than ever of the speciating processes, more predictive power to foresee the intended and unintended results of their actions, and more power to reverse the undesirable consequences. Increasingly, we know these faunal and floristic locales and natural histories; we find that in our land use decisions we have a vital role in whether these stories continue. We have sufficient knowledge and control over the threatening social, economic, and political forces to have options and alternatives. Never before has this level of question been faced. The answers are generating a deeper sense of responsibility on the landscape. Humans ought not to superkill a species without a superjustification. That may involve redefining what property rights mean in the light of learning what a species is and discovering the values carried by species.

Far from being soft, trivial, or misguided, we want to insist on a full reckoning with all the *real costs* of development when realty is developed, including the costs in shutting down biological speciation. What we are doing is always coupled with what we are undoing, and good conservation law can force landowners to take serious account of all that they are doing and thereby undoing. In legal terms we can say that the right to liberty, but only in a weak sense (property development), is here cast against respect for life—the "right to life," so to speak—in a strong sense, since superkilling and extinction result.

66. This argument is elaborated in the sources in note 59, *supra*.

VI. OWNER VERSUS TRUSTEE

The root meaning of "property," going back to the Latin *proprius*, involves what is one's own possession. "Wild" essentially means: "outside the possession, control, management, and ownership of humans." Wildlife law has moved away from conceiving wildlife as owned either by landowner or state, toward a public trust concept of regulation. This regulation is typically characterized as being of "natural resources," a conceptual gain over the concept of ownership so far as species are concerned, but perhaps the next inquiry is whether species are nothing but entrusted "natural resources" to be regulated whether by state or nation. For here, where we vitally encounter the biological powers of speciation, we are dealing more with our earthen "sources" than with national resources. The regulation appropriate is the regulation of persons who will thereby let wildness be. Not only has the landowner no right to extirpate a species, the nation has none either.

Suppose that the United States decided to extirpate an endemic plant species within its boundaries. Such a decision might be justified, but the case would have to be argued against a presumption that such a species ought not to be destroyed—for the sake of the nations, for the sake of species, out of respect for life on Earth. The federal government has no more right than anyone else to shut down speciation. It too has a weak right to possess the continent and territories it inhabits. It too has imperfect powers of ownership. There is some wisdom in the wit that nicknamed the multiagency committee with the power to authorize extinctions the "God committee." The name indicates the seriousness of presuming that one has the right to eradicate biological natural kinds. The last time there was a divine command on this matter was in the days of Noah: "[K]eep their kind alive upon the face of all the earth."⁶⁷ Fortunately, we already have a promising precedent for a category that transcends that of mere resources, the designation of wildlife sanctuaries and refuges. For there is something sacrosanct about a species of life, and in the presence of the sacred, claiming property rights is profane, title to ownership is indeed a slender reed, and to think of the sacred in terms of resource protection is going "too far."

That everything on Earth was put here for our human benefit is surely fiction, and that everything on Earth should remain here for our human benefit is equally fiction. That everything on the American continent was put here for our national benefit is fiction, and that

67. *Genesis* 7:3.

everything should remain here for our national benefit is equally fiction. Continuing, in incremental distribution of this claim, that everything on my landscape-property was put there for my benefit is fiction, and that everything on my property should remain there for my benefit is equally fiction. That is one real truth about real estate.