

BOOK REVIEWS

THE INJUSTICE OF ANIMAL WELFARE: A REVIEW OF *ANIMALS, PROPERTY, AND THE LAW*

By
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During the past several years, an interesting debate has emerged concerning the differences between animal rights and animal welfare. Fueling this debate and at the very center of it are the views of Gary Francione, Professor of Law and Katzenbach Scholar of Law and Philosophy at Rutgers University. Francione maintains that the notion of animal rights, from both a logical and a moral point of view, is very different from the notion of animal welfare. He contends that not only is this distinction essential to clear thinking, but it is of vital importance in elucidating goals and in choosing the means to achieve these goals. According to Francione, animal rights theory rejects the instrumental treatment of nonhumans and opposes all forms of institutionalized animal exploitation as morally objectionable. On the other hand, animal welfare accepts the legitimacy of at least some animal exploitation, merely imposing a formal requirement that the use of animals should be "humane" and that "unnecessary" suffering should be avoided.

In *Animals, Property, and the Law*, a clearly written and rigorously argued interdisciplinary work involving law, philosophy, economics, sociology, and history, Francione argues that animal welfare is not only different from animal rights, but that animal welfare is "structurally defective" because it requires that we "balance" human and animal interests in order to determine whether the particular conduct in question is "humane." The problem is that because animals are viewed as *property* under the law, this balancing act never fairly weighs animal interests and thus *cannot* provide any meaningful protection to animals. Francione contends that

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human interests are protected by rights in general and by the right to own property in particular. As far as the law is concerned, an animal is the personal property, or *chattel*, of the animal's owner and cannot possess rights. Indeed, it is a fundamental premise of our property law that property cannot itself have rights as against human owners and that, as property, animals are objects of the exercise of human property rights.¹

The result is that animals almost always lose in this supposed balancing process.

Francione divides his book into three sections. In the first part, Francione discusses general matters connected with the status of animals as property. He introduces the notion of "legal welfarism," which ostensibly "prohibits the infliction of 'unnecessary' pain and suffering on animals and requires that they be treated 'humanely,' [but he interprets these terms] in light of the legal status of animals as property, the importance of property in our culture, and the general tendency of legal doctrine to protect and maximize the value of the property."² As part of this discussion, Francione examines the legal concept of "standing" and scrutinizes various normative issues that he claims are entirely ignored by current legal doctrines concerning animals. Francione also includes a fascinating discussion of the nature of rights in the first portion of the book. Those who have found past philosophical discussions of animal rights to be less than lucid will find that Francione can examine the issues without falling into either legal or philosophical jargon. Readers will relish the clarity and insights of Francione's analysis.

In part two, Francione examines anticruelty laws, and concludes that these laws provide only that level of protection that will allow the most efficient use of the animal given the general acceptance of institutionalized animal exploitation. For example, anticruelty laws often require proof of malice. It is extremely difficult to prove malice on the part of someone who is, for example, castrating "food" animals without anesthesia, or subjecting "laboratory" animals to unspeakable pain and suffering precisely because these activities occur in the context of socially accepted animal use. As long as the conduct serves a "legitimate purpose," then almost any conduct that facilitates the use of the animal for that particular purpose will be regarded as "necessary" and "humane."

In part three, Francione examines the use of animals in experiments and analyzes the statutory and regulatory scheme created by the federal Animal Welfare Act. He argues that this act, like virtually all anticruelty laws, has nothing to do with any abstract notion of the well-being of the animal, but rather, is concerned with the level of care that will best facilitate the production of scientifically reliable data from the animal. Like animal owners and animal users in general, scientists have successfully avoided any level of regulation that transcends this minimal level needed for "efficient" animal exploitation.

¹ GARY L. FRANCIONE, *ANIMALS, PROPERTY, AND THE LAW* 4 (1995).

² *Id.* at 4-5.

From this brief description of *Animals, Property, and the Law*, it might sound as if Francione is dealing with highly abstract notions such as necessity, cruelty, and property and, of course, he is. Francione examines these notions not only philosophically, but he argues so clearly and brings in such a wealth of examples—regulations, statutes, and cases—that one would be hard-pressed to disagree with his notion that, for example, the anticruelty laws do not really protect animals in any but the most extreme cases: instances which reflect “completely gratuitous cruelty.”³

The cases Francione cites not only corroborate his assertions, but in themselves make fascinating reading. An attorney would read with approval the many legal citations, but the layperson can also understand the cited cases after Francione has explained the courts' reasoning and the definitions and exceptions provided in anticruelty statutes.

Although it may not have been his intention, Francione clarifies certain court decisions, which to the non-legal mind, seem, on first appearance, to be nonsensical or even absurd. In his examination of *State v. Fowler*,⁴ Francione informs us that Fowler beat his dog, submerged the dog's head under water in a hole dug for that purpose in the backyard, kicked the dog, then tied him to a pole near the water-filled hole. Such treatment would sound like cruelty to an ordinary person, I think. Furthermore, if such a person were told that there were anticruelty laws, it would seem evident that Fowler was not obeying these laws and would be found guilty by a court. But although Fowler was indeed found guilty by a lower court, the appellate court reversed the conviction because a violation of the anticruelty statutes in that state must be “wilful.” As explained by the court in *Fowler*, “a ‘wilful’ act excludes punishment administered to an animal in an honest and good faith effort to train it.”⁵ In other words, Fowler may have been merely trying to train his dog not to dig holes, so kicking and beating his dog was not a wilful violation in the opinion of the court. Thus, the property rights of dog-ownership were preserved.

Anticruelty statutes, asserts Francione, do not prohibit all acts which may seem cruel, but only *unjustified* or *unnecessary* instances of cruelty. Furthermore, these statutes are not specific, that is, they do not forbid particular practices. But even more startling to the nonlegal mind, “cruelty”—at least in the case of animals—does not mean what we ordinarily understand by that word.

The same, or similar, expressions of “unjustified” or “unnecessary” are found, notes Francione, in the laws that protect children from abuse. “Unnecessary” or “excessive” punishment of children is prohibited just as it is illegal to inflict “unnecessary” or “excessive” suffering on an animal. But the standards are apparently not the same, for what constitutes cruelty to children is based on the common understanding of that word, while that is not the case for animals. As Francione explains, cruelty to children

³ *Id.* at 160.

⁴ *State v. Fowler*, 205 S.E. 2d 749 (N.C. Ct. App. 1974).

⁵ *Id.* at 751, citing *State v. Avery*, 44 N.H. 392 (1862); FRANCIONE, *supra* note 1, at 136.

is decided by jurors according to their own understanding of that notion or their own experiences while

what is 'necessary' or 'humane' treatment as far as animals are concerned depends on a most technical legal interpretation of 'cruelty' or 'necessary suffering' and not an interpretation based on ordinary-language meaning. Indeed, a theme that appears consistently in the cases is that the cruelty prohibited by anticruelty statutes is not necessarily that which would be considered as cruelty as that word is used in nonlegal contexts.⁶

Francione does not characterize it as such, but the legal system plunges us into a Kafkaesque world in which cruelty does not mean cruelty when it concerns animals, and property refers in almost every case to material objects or intellectual objectifications except when we are talking about animals.

We begin to understand that cruelty, as it is used in laws pertaining to animals, is not an abstract or absolute ideal, but must be considered always within the context of social norms established by humans for our own well-being. It is for these reasons that we begin to comprehend why these so-called anticruelty laws are "for the most part useless against such activities as hunting, fishing, target practice with live animals, scientific experiments involving live animals, particularly painful and stressful methods of agricultural husbandry and slaughter, circuses, zoos, or the uses of animals for other forms of entertainment."⁷

Do we have to read the hunting books to know how slowly animals die when shot with bow and arrow? Do we have to view video tapes of slaughterhouse practices to realize that animals are stressed, wounded, and often die in transport to the slaughterhouse, and are kicked and shocked to make them move more quickly once they arrive there? Yet the law does not recognize these behaviors as cruel. "Man is the measure," proclaimed Protagoras nearly twenty-five hundred years ago.⁸ This statement was understood, at least by the later Sophists, to mean that man was the measure concerning good and evil. It looks as if present-day law concerning animals has not changed much since then.

One of the ways in which Francione attempts to explain the anticruelty laws involves the distinction between direct and indirect duties. A direct duty is one owed directly to the being involved, while an indirect duty may involve a being but is not owed directly. Kant's discussion of this distinction is well-known. He claimed that one has direct duties only to man and indirect duties to animals because animals are only "means to an end" and that end is human; humans are "ends in themselves."⁹ Such a view led Kant to claim that while an old and faithful dog deserves a reward when he is too old to work; yet if a man shoots such a dog, "he does not fail in his duty to the dog, for the dog cannot judge." So Kant would have

⁶ FRANCIONE, *supra* note 1, at 143.

⁷ *Id.* at 129-30.

⁸ "Of all things the measure is Man." Protagoras of Abdera, quoted in KATHLEEN FREEMAN, *ANCILLA TO THE PRE-SOCRATIC PHILOSOPHERS* (1948).

⁹ See IMMANUEL KANT, *LECTURES ON ETHICS* 239-240 (Lewis Infield trans. 1979).

us believe that the act of shooting such a dog is "inhuman," that the dog deserves a reward but that shooting the dog "harms" only the man who shoots him. Apparently, Kant does not consider the harm done to the dog whose life is ended when his usefulness has ceased. Presented in this way, these views seem inconsistent; nevertheless, if Francione's analysis is correct—and the evidence looks overwhelming—then we have adapted such views and incorporated them into our legal system. Kant's distinction is not explicitly discussed by Francione, but it is clear that he understands the full implications of such a distinction and is familiar with Kant's treatment of direct and indirect duties.

The discussion of the anticruelty laws and Francione's claim that they offer no real protection for animals, is part of his broader argument concerning what he calls "legal welfarism": the notion that under certain circumstances it is morally acceptable to kill animals for food or sport, or to cause them pain in certain kinds of research. Francione asserts that legal welfarism is inconsistent with the notion of animal rights. It is clear that Francione takes the notion of rights for animals seriously. Francione would not agree with animal activist Peter Singer that "the language of rights is merely a convenient political shorthand, even more valuable in the era of thirty-second TV news clips."¹⁰ Indeed, Francione has shown that while various anticruelty statutes may appear to establish the right for animals to be free from inhumane treatment, these laws in fact fail to do so while protection can be overridden by even a trivial human interest. Rights, on the other hand, entail "an interest that is not subject to abrogation merely because someone else will receive a benefit from annulling the right."¹¹

Those who know that Francione has litigated cases involving animals for over a decade will recognize his passion for justice in *Animals, Property, and the Law*. Francione, however, maintains a professional tone. He reports on what the law does and does not allow in an articulate but cool manner. He never overdramatizes the plight of animals. It is not surprising, then, when Francione states rather dispassionately in the "epilogue" that

an alternative legal status for animals in which they would no longer be regarded as property would probably entail dramatic economic and social consequences, given that our economy is heavily dependent on the level of animal exploitation protected by legal welfarism. Therein lies the intractable nature of the present controversy.¹²

What Francione is really calling for is social change: in fact, a revolution. Not a revolution of guns and bullets, but a revolution in the way that we think and thus one that ultimately would be reflected in our legal system. Consider for a moment what such a revolution might portend: no more raising of cattle for food, no more pollution of our ground water, less destruction of the rain forests in South America, more grain to feed the

¹⁰ PETER SINGER, *ANIMAL LIBERATION* 8 (2nd ed. 1990).

¹¹ FRANCIONE, *supra* note 1, at 253.

¹² *Id.* at 261.

hungry, less heart disease and cancer, greater emphasis on preventive medicine, and so forth. But this is just the tip of the iceberg. If the great thinkers of the past are correct in their assertion that cruelty and violence to animals engenders violence toward other people and lessens our own humanity, how might our world change if we could eliminate this cruelty to animals? How might it change if we could view animals, not as property, not as means to our ends, but as the biological beings they are, with desires and preferences and capable of pleasure, pain, joyful anticipation, and fear? How would our relations to other people change in such a world? Is it realistic even to hope for a world in which violence is diminished; a world in which animals, women, people of color and homosexuals are not exploited? Is such a world simply a utopian dream? Would Francione call this kind of musing humanocentric consequentialism? His book provokes such questions.

Animals, Property and the Law is a book that is accessible to everyone, and that should be read and studied by anyone interested in the issues of animal rights or animals and the law. Francione explains both legal and philosophical concepts in ways that are simple, but not simplistic. His research is painstaking, and the book is an excellent reference work for that reason alone. But what makes *Animals, Property and the Law* a very unusual book is that Francione, in addition to being a talented academic, is also a practicing lawyer with a great deal of practical experience with animal welfare; he understands better than anyone why it simply does not work. It is Francione's masterful theoretical analysis combined with the insights he has gained firsthand as an activist lawyer that make this book truly unique.

Francione's book, which is the first truly sustained effort to analyze the issue of animal rights from a jurisprudential perspective, is compelling and provocative, and represents the most sustained intellectual effort since Tom Regan's *The Case for Animal Rights*.¹³ Francione has developed Regan's rights theory in fascinating ways, and his work promises to redirect the debate on these issues.

¹³ TOM REGAN, *THE CASE FOR ANIMAL RIGHTS* (1983).

A DANGEROUSLY MISLEADING CASE FOR EXTINCTION:
A REVIEW OF *NOAH'S CHOICE: THE FUTURE OF
ENDANGERED SPECIES*

By
SHENNIE PATEL*

*For that which befalleth the sons of men befalleth beasts . . . as the one dieth, so dieth the other; yea, they all have one breath; so that a man hath no preeminence above a beast.*¹

The world is filled with orchids and insects, birds and amphibians, mammals and sea life. This intricate network of life is called biodiversity.² Biodiversity includes all of the world's species and is the foundation of all life, including human life. It is undeniably indispensable to *all* living creatures. At present, extinction of species is occurring at an unnaturally accelerated rate. Although the rate has not been determined with absolute precision, the extinction rate is thousands of times greater than the rate at which new species are evolving.³

The benefits individual species bestow upon the entire web of life are not quantifiable, and likewise, the consequences of mass extinction on the ecosystem are unpredictable. However, the absence of scientific certainty

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¹ Ecclesiastes 3:19 (King James). The authors preface their book with a religious quote which implies that human effort is worthless without the adequate tools:

What doth it profit, my brethren, though a man say he hath faith, and have not works?
Can faith save him? If a brother or sister be naked, and destitute of daily food, And one of you say unto them, Depart in peace, be ye warmed and filled; notwithstanding ye give them not those things which are needful to the body; what doth it profit? Even so faith, if it hath not works, is dead, being alone.

James 2:14-17

The analogy probably refers to the U.S. efforts at conservation and its tool, the Endangered Species Act. However, the quote introducing this book review reveals that there are other valid scriptures which apply to Earth's creatures.

² Biological diversity is defined as "the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems." Convention on Biological Diversity, June 5, 1992, art. 2, 31 I.L.M. 818.

³ EDWARD O. WILSON, *THE DIVERSITY OF LIFE* 346 (1992). Presently, the exact amount of biodiversity loss is uncertain, but it is certain that the rate is extremely high. "Human activity has increased extinction between 1,000 and 10,000 times over this level [one species per million species per year] in the rain forest by reduction in area alone. Clearly we are in the midst of one of the great extinction spasms of geological history." *Id.* at 280.

is not a sufficient reason to ignore the potentially threatening effects of human activities on the Earth's species.

Congress responded to this threat by enacting the Endangered Species Act of 1973.⁴ The Act provides a means "whereby the ecosystem upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve [these] purposes."⁵ The Act's purpose is not only to preserve endangered and threatened species, but also to extend protection to portions of the ecosystem upon which those species depend.⁶ Although the law does not take on the burden of returning all of the world's endangered species to their original status, it does extend protection to at least a portion of those endangered species in order to help them recover. There is room for improvement in the Act, and Congress is now debating issues concerning the Act's reauthorization and the extinction crisis.

*Noah's Choice: The Future of Endangered Species*⁷ by Charles C. Mann and Mark L. Plummer examines the United States' response to endangered species protection. The authors primarily criticize the Endangered Species Act for failing to recognize the needs of humans in addition to the need to conserve. The authors assert that it is time "to question the goal that underlies the act: Save every species, no matter what the cost."⁸ Mann and Plummer seek to prove that an extinction crisis probably does not exist.⁹ Even granting the possibility of such a crisis, they assert that enforcing the Act impacts the nation's human life too greatly and produces a situation in which our

best intentions will be forced to collide with themselves. What do we value more—a little bit of insurance for a struggling bit of our national heritage . . . or a slight easing of the pressure on some of our fellow citizens' lives . . . ? To borrow from Freud, what do we humans *want*?¹⁰

The authors assert that the Act should be replaced with a gentle version that does not force conservation down people's throats. However, the evidence they present to prove that the Act destroys all human values is unconvincing and misleading. For instance, they cite only a few representative conflicts between conservation and human development, but

⁴ Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1543 (1994); *see also* Tennessee Valley Authority v. Hill, 437 U.S. 153, 180 (1978) (calling the Act "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.")

⁵ 16 U.S.C. § 1531(b).

⁶ *See* Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 115 S.Ct. 2407, 2418 (1995) (upholding regulations that interpreted the Act to include habitat modification among the prohibited harms to a listed species).

⁷ CHARLES C. MANN & MARK L. PLUMMER, *NOAH'S CHOICE: THE FUTURE OF THE ENDANGERED SPECIES ACT* (1995).

⁸ *Id.* at 215.

⁹ Throughout the book, the authors insinuate that the crisis may not be a crisis: "The possibility of large-scale extinction is real and important, but at present all we can say is that it *may happen sometime*. . . . [O]ur biodiversity problem is better thought of in terms of *endangerment* today than extinction tomorrow." *Id.* at 78, 80 (emphasis added).

¹⁰ *Id.* at 26.

they infer that *all* of the Act's efforts experience similar turmoil.¹¹ The authors also dispute, without support, the findings of well-known scientists, such as noted Harvard naturalist Edward O. Wilson, who have proclaimed the dangers of ecosystem losses. For example, the authors argue that the individual parts of the ecosystem are not as important as the whole.¹²

Although the authors do present some valid criticisms of the Act, the book loses its credibility because the valid criticisms are enmeshed with questionable speculations presented as facts. Their recommendations for a new Act involve some proposals worth consideration, such as the national land trust.¹³ However, the authors also suggest that species conservation can be *equally* balanced against human needs, which is a questionable proposition. This balancing appears as an especially troubling prospect when one considers the rapidly growing human population. With this increase, the scales will tip heavily toward the choice to favor human needs. Unfortunately, *Noah's Choice* often acknowledges the legitimacy of only one side of the issues attending such conflicts.

Organization

The authors have organized their text into eight chapters, the first seven attempting to demonstrate the Act's utter failure. Chapter Eight, the climax of the authors' presentation, offers the authors' idea of a more humane solution to the ineffective Endangered Species Act. Lastly, the book ends with an appendix entitled "The Endangered Species Act After Twenty Years," which purports to evaluate the Act by examining its effectiveness at protecting listed species. The authors, conceding that this type of analysis would be a daunting task, therefore present a few select examples and statistics that generally suggest the Act's failure.

The authors main contention is that the Act does not work and will not work until it allows for change. One such modification the authors offer is the addition of a resolution requiring "conversation," or a meeting of the minds. The authors' credo is subtle, yet definite: "We must choose to choose."¹⁴ Because they believe the Act has failed to help the overwhelming majority of species under its care, the authors propose that we

¹¹ In 1992, the World Wildlife Fund analyzed over 2,000 federal agency consultations with the U.S. Fish and Wildlife Service from the years 1987-1991 and determined that less than 20 were completely stopped in favor of endangered species. See Adam M. Roberts, *The Endangered Species Act: A Commitment Worth Keeping*, 8:3 ANIMAL GUARDIAN (Doris Day Animal League) (1995) at 5, 8.

¹² "Biodiversity is necessary. . . . It is of utmost practical importance to us; we destroy it at our peril. And, indeed, this belief is true—for biodiversity *as a whole*. But that is not the same as saving individual species." MANN & PLUMMER, *supra* note 7, at 124. "In sum, biodiversity as a whole has overwhelming utilitarian value, but most individual species do not." *Id.* at 133.

¹³ *Id.* at 227-33.

¹⁴ *Id.* at 236. "In the world of the practicable, the question is not whether a proposal is free from flaws but whether it has the potential to improve our lot and that of the natural world." *Id.*

play God when it comes to saving our limited natural heritage. The authors presume that the choice to protect endangered wildlife precludes the choice to further human development. This presumption belies facts such as the Act's inclusion of economic considerations when planning conservation efforts.¹⁵ Protecting biodiversity and allowing economic development is not necessarily an either/or proposition as the authors suggest.

The Noah Principle Versus Noah's Choice

The authors aim to prove that this country's approach to the problem of species extinction has failed due to two significant problems. First, the duty to protect species as established under the Endangered Species Act is an impossible duty to fulfill. Second, single species extinction has *not* been proven beyond a doubt to be permanently detrimental to the entire web of life. Even if extinction were proven to be ultimately catastrophic, Mann and Plummer argue that thousands of individual human actions should not each be held accountable because no *single* human activity is blameworthy.

The authors primarily argue that the Act is absolutely inflexible because it does not recognize other interests, such as development. However, this argument weakens once it is acknowledged that some provisions of the Act, such as the one advocating habitat-conservation plans, do include economic considerations. They begin their argument by explaining that the Act is fundamentally grounded in a moral, ethical, and spiritual duty to preserve the world's ecosystem, a duty that literally takes priority over all other duties. As the authors illustrate the difficulties involved in actually implementing and enforcing this duty, they hope to prove that the obligation is impossible to fulfill. They describe case histories as failures in which no compromise was reached between human development and species protection. Essentially, the authors contend that the Act remains ineffective because it operates according to a concept known as the Noah Principle:

In some ways, Noah had it easy. The materials he needed to build his Ark were at hand and the design, provided by the Supreme Deity, was guaranteed to be sufficient for the task. Two by two, the creatures walked aboard, filling the vessel just to capacity. When the parade finished, Noah had fulfilled his obligations. He had saved "every living substance." There had been no need to exercise judgment or agonize over tough choices. He and his sons just stood on the gangplank and let everything in. When no creature was waiting outside, he shut the door and waited for the rain.¹⁶

This act of preserving species which involves no favoritism is generally known as the Noah Principle. Mann and Plummer argue that enforcing the Act involves no considered judgment or balancing on the worth of

¹⁵ See DEFENDERS OF WILDLIFE, *SAVING AMERICA'S WILDLIFE: RENEWING THE ENDANGERED SPECIES ACT 61* (1995) [hereinafter DEFENDERS].

¹⁶ MANN & PLUMMER, *supra* note 7, at 212.

the nation's wildlife. "The law was virtually absolute: 'Thou shalt not take.'"¹⁷ The authors take great pains to characterize the Act as nothing more than an insensitive, unconditional Noah Principle.¹⁸

However, perhaps recognizing that their sweeping characterization is limited, the authors do mention the Act's provision allowing for habitat conservation plans and incidental take permits. Habitat conservation plans allow developers and landowners to formulate alternative actions which will outweigh any negative consequences that their projects may have on the endangered species in question. In addition, upon accepting a plan, the U.S. Fish and Wildlife Service also issues an incidental take permit which excuses any factored-in harm to the species.¹⁹ The authors attempt to lessen the significance of the provision allowing habitat-conservation plans by asserting that the planning process is hampered by the need to satisfy *all* interested parties. Not only is this a weak argument, but their treatment of habitat conservation plans shows that the Act is not as uncompromising in carrying out its Noah Principle duty as the authors would have us believe.

The authors' second major criticism of endangered species policy concerns the phenomenon of species extinction. While criticizing many of the claims of high extinction rates as lacking reliable scientific evidence, the authors assert, without any concrete evidence, that there probably is no crisis. Geneticists like Charles Darwin have attempted to describe and predict the evolutionary process and naturalists like Edward O. Wilson have similarly attempted to describe and predict the current extinction crisis. The authors spend several chapters methodically criticizing the scientific study of species as developed by these scientists. For instance, they find the definition of "species" and methods of classifying species unclear. Some species are classified as "quasi-species," and other species have several populations which are then potentially classified as subspecies. Some species are reproductively isolated from other populations, making them another type of species, but despite their isolation, hybrid species occur. Still other species develop unique niches in nature. The point of the authors' lengthy effort to explain the complex system of species classification is to conclude that "our planet is stuffed to bursting

¹⁷ *Id.* at 187.

¹⁸ "[T]he Endangered Species Act will not be satisfied with anything less. . . . [A]ll biodiversity must be saved" *Id.* at 209. The authors' use of the word biodiversity in this context is inaccurate; the Act's provisions protect individually listed species and their critical habitat, not biodiversity as a whole. "Clinging to the Noah's Principle is an example of . . . [casting] social and environmental policy in the optative mood." *Id.*, citing MARK SAGOFF, *THE ECONOMY OF THE EARTH* 200 (1988). "Optative" is defined as "wishful" or "dreamy." *Id.* at 210.

¹⁹ The permit does not allow complete destruction of an entire species but ensures that "nobody will go to jail if a bulldozer driver inadvertently flattens a bird or a butterfly; only a few individuals, if that, may be taken, and these only inadvertently. But it gives developers legal protection, so long as their projects do not imperil the species as a whole." *Id.* at 183.

with life,"²⁰ and any attempt at estimating the "global roster of species"²¹ is pure guess-work.

The authors conclude that the possibility of an extinction crisis is negligible, or at least unpredictable, because the extent of life is unfathomable. The authors strive to prove this statement by citing the works of individuals like naturalist Edward O. Wilson and Frank W. Preston, the creator of the "species-area curve."²² The authors depict the species-area curve as a formula useless to predict the potentially catastrophic consequences of extinction.²³ They turn to Wilson's efforts in testing the species-area curve. Fully endorsing Preston's revolutionary work, Wilson set out to test the thesis that a necessary balance of evolution and extinction exists which maintains a healthy ecosystem and that this balance can be determined scientifically. Any proposal to test the species-area curve obviously involves incredible and possibly unattainable measures.²⁴ The authors use this immense difficulty as the basis for their statement that predicting extinctions is indeed problematic and probably always will be.²⁵ Because scientists are unable to solidly predict extinctions, the authors then question the reliability of the claim that an extinction crisis even exists. They admit that species decline occurs and that its rate is probably increasing at a somewhat higher rate than in the past. However, the authors are unconvinced that the world is experiencing an unnatural crisis and devote many pages to repeating this sentiment.

Their message, however, is often unclear. They assert that the species-area curve is ineffective in that it is unable to "help us assess the harm wreaked by that encroachment [of humankind on the natural world], nor tell us what we should do in response."²⁶ In reality, the species-area curve involves all that is known about the relationship between areas of habitats and the species living within them.²⁷ Science often employs similar models when "direct measures cannot be made."²⁸ Therefore, it seems highly

²⁰ *Id.* at 42.

²¹ *Id.* at 40

²² The species-area curve "describes in mathematical terms the relation between the size of a particular area and the number of species that can inhabit it." *Id.* at 54. Preston labored for many years to discover and formulate the fundamental laws of biodiversity. *Id.*

²³ "The species-area curve is not able to foretell everything, like a crystal ball; indeed, some scientists regard it as hopelessly imprecise and even misleading. Nonetheless, the species-area curve—fruit of an amateur ecologist's inspired mathematical doodling—is the basis for all current predictions of mass extinctions." *Id.*

²⁴ "The obvious way to test these ideas, Wilson said, would be to kill every living creature on some island and then see whether its fauna would be returned to the same level of abundance, as the theory predicted." *Id.* at 59.

²⁵ Estimating the rate of extinction has been a challenge for scientists for a great many decades: "Will it ever be possible to assess the ongoing loss of biological diversity? I cannot imagine a scientific problem of greater immediate importance for humanity. Biologists find it difficult to come up with even an approximate estimate of the hemorrhaging because we know so little about diversity in the first place." WILSON, *supra* note 3, at 254-55.

²⁶ MANN & PLUMMER, *supra* note 7, at 80.

²⁷ WILSON, *supra* note 3, at 275.

²⁸ *Id.* These models "yield first approximations that can be improved stepwise as better models are devised and more data added." *Id.*

unlikely that scientists would employ such a model with a carefree attitude. The authors, however, give the impression that the species-area curve was randomly selected and relied upon for predicting the rate of extinction.

The authors then move from criticizing the methodology to questioning whether an extinction problem even exists.²⁹ Surprisingly, they dispute the works of great biologists like Wilson, who, after years of research, claim that the crisis is very real.³⁰ Mann and Plummer assert that "biologists frequently liken the world's biodiversity to a library in which the vast majority of books have never been read. And even those that have been read are unlikely to be exhausted."³¹ The authors aspire to convince the reader that the extinction crisis is nothing more than a speculative spasm of ideas lacking scientific basis. However, they present nothing to counter these ideas. By refuting the usefulness of the species-area curve, they suggest at most that the testing mechanism is faulty, not that the underlying theory being tested is necessarily false.

After striving to demonstrate the grave concern within the scientific community that high extinction rates come from theoretical projections instead of hard evidence, the authors, for argument's sake, accept a presumption of an accelerated extinction rate. Once again, they return to the Endangered Species Act, its allegedly misguided reliance on science, and its attempt to prevent the endangered species problem from worsening even though they believe the ecological consequences of today's extinctions are rarely devastating.³² One of their key points is that most species declines result not from a single, monstrous action, but from thousands of individual actions. This is referred to as the "Cooked Frog Problem."

Drop a frog in a pot of boiling water, they say, and it will immediately leap free. But put that same frog in a pot of cool water and gradually turn up the heat, and the frog will happily sit and be cooked to death. Each action that we take to threaten biodiversity is equivalent to turning up the heat another notch. A gas station here, an apartment building there, a day-care center over there, an industrial park next door—we scarcely notice them. . . . But such small losses add up, cooking this part of the species here, then that piece over there³³

Returning endangered species to their *original* conditions would require turning back the clock on evolution or the complete removal of thousands of human actions. Both requirements, the authors contend, are quite im-

²⁹ If the authors do not believe in a theory, then it seems futile to disprove the *methods* used to test the theory rather than to disprove the theory itself.

³⁰ In other instances, the authors use Wilson's own words to support the argument that Earth's species are limitless:

"The honeybee is like a magic well," Edward O. Wilson once told a congressional committee. "The more you draw from it, the more there is to draw. And so it is with species, which is a unique configuration of genes assembled over thousands of years, possessing its own biology, mysteries, and still untested uses for mankind."

MANN & PLUMMER, *supra* note 7, at 121.

³¹ *Id.*

³² The authors do not offer support for this contention.

³³ MANN & PLUMMER, *supra* note 7, at 85.

possible. Nevertheless, despite this impossibility, the government continues to impose penalties on innocent citizens, all in the drive to stop evolution. Unfortunately, the authors ignore the fact that the Act's goal is not to return the species to their *original* conditions, but instead to postpone extinction and help recover the species to the point where the Act's protection is no longer necessary.³⁴ The Act's intended goal is much more modest than the one the authors present.

"Noah's Choice," the last chapter, represents the final scene in Mann and Plummer's drama. They use it to propose a solution to what they have been documenting as an untenable conflict between conservation and development. Instead of following the Noah Principle, the Act should endorse a more modern "Noah's Choice." The authors assert that the Noah Principle is both unethical and impracticable, as demonstrated by the Act's allegedly unproductive twenty-year history. Noah's Choice, on the other hand, would give the modern Noahs a budget and a bottom line, reflecting indirectly the priorities of people with differing aspirations. A friendlier Act would balance the competing values with a system of "conversation" which would involve the "process of coming to an understanding."³⁵ This vague notion of conversation, developed by the contemporary German philosopher, Hans-Georg Gadamer, would balance the differing values held by competing interests. The picture of "conversation" the authors draw evokes an image of a group of individuals sitting in a coffee house sharing intellectual discourse. However, the reader is left asking whether this informal situation is realistic or whether the authors envision a process similar to the formal consultation process which is currently provided for in the Act.³⁶

The authors recommend the use of a *better* system with which to provide more acceptable data to make decisions about the fate of the natural world. No hints are given regarding the parameters of such a *better* system or from where or whom such a system should originate. A national land trust, modeled after a system employed by the Nature Conservancy, would help facilitate all competing interests. Participation would be voluntary,³⁷ and the budget would come from the political process. It all sounds so simple. Requiring a committed investment to finding more sound biodiversity research, coupled with a financially stable national land trust³⁸ might indeed be an encouraging solution to the endangered

³⁴ 16 U.S.C. §§ 1531, 1533(f) (1994).

³⁵ MANN & PLUMMER, *supra* note 7, at 216.

³⁶ The Act requires federal agencies to consult with the U.S. Fish and Wildlife Service whenever a project affects an endangered species. 16 U.S.C. § 1536(a). The authors admit that "[f]ew such consultations result in the outright cancellation of a project." MANN & PLUMMER, *supra* note 7, at 105. Turning to the lack of total cancellation, the authors then question the agency's dedication to species protection. "[A]nd the lack of cancellations may . . . be better regarded as evidence that the agency is not demanding enough protection for the listed species." *Id.* However, the authors again fail to present a basis for their claim.

³⁷ A biodiversity advisory board would be implemented to include a panel of eminent biologists such as Jared Diamond, Paul Erlich, and Edward O. Wilson. *Id.* at 229.

³⁸ The political process would be the essential arbiter in allocating funds for the trust and would make the choices about "how much biodiversity to save." *Id.* at 229.

species problem. When one considers, however, the recent Congressional bickering over the national budget, it appears a major element of the authors' proposed system would fail before it was even allowed to leave the planning table. The authors carelessly ignore this political fact.

The authors lastly propose that the entire decision-making process of species listing and conservation should be left to our politicians. "Relying solely on experts to determine biodiversity policy is as absurd as using public referenda to decide which species are endangered. . . . [P]olicymakers cannot be required to follow the dictates of experts."³⁹ Likewise, bringing biodiversity into the political arena will remove it from its "scientific pedestal."⁴⁰ Congress does represent the national will, but that national will is only a short-term collection of organized interests that is unsuited to making long-term decisions that could have unknown consequences on the world's ecosystem. The authors do not address this problem. The environmentally-minded experts on the panel the authors propose would be allowed to research and produce solid recommendations for endangered species conservation, but the ultimate decision to accept those recommendations would be left to the political non-experts.⁴¹

The authors' recommendations lack in-depth analysis. Instead of suggesting proposals that are practical, such as management plans that lighten the regulatory burden on landowners,⁴² the authors suggest changes that require many other changes, including complete reassessment of the Congressional budget to pay for the trust. It appears the authors' recommendations are not meant to save endangered species or to produce a fairer system, but would instead result in an Endangered Species Act that is nothing more than a paper tiger.

The Stories

The relationship between advocates of endangered species conservation and economic development has been antagonistic and frustrating. In its simplest terms, the debate is often between conserving ecosystems valuable to species and guaranteeing unlimited development. *Noah's Choice* attempts to illuminate this complex relationship by selectively highlighting the conservation efforts of several species: the American burying beetle; the snail darter; the Karner Blue butterfly; the whooping crane or the American crane; the black-capped vireo; and the golden-cheeked warbler. In support of their criticisms of the Act, the authors portray all conservation efforts in these cases as ineffective. Through their story-like

³⁹ *Id.* at 222.

⁴⁰ *Id.*

⁴¹ *Id.* at 222, 229.

⁴² Other proposals include creating mechanisms for technical assistance, providing incentives for private landowners, and increasing the role of states. See DEFENDERS, *supra* note 15, at 32-45. For proposals that focus on economical considerations, see THE KEYSTONE CENTER, THE KEYSTONE DIALOGUE ON INCENTIVES FOR PRIVATE LANDOWNERS TO PROTECT ENDANGERED SPECIES 26-43 (1995).

portrayals of innocent man versus omnipotent nature, the authors strive to prove that the Endangered Species Act makes for a poor ark.

Mann and Plummer traveled throughout the United States in search of dramatic examples of head-on conflicts between the environmentalists trying to enforce the law and the developers trying to improve the human situation. Chapter One, entitled "Seventeen Beetles," sets the stage for the drama by introducing Karl Stephen, an avid bug collector, and his fateful discovery of *Nicrophorus americanus* Olivier, the American burying beetle. This chapter, like the others, is written like a play in which the reader is moved from one unfinished scene to another, later to return to and complete the former scene. Although this writing technique produces a book which is easy and interesting to read, it often becomes difficult to determine the difference between fact and speculation.

The endangered American burying beetle is important as "[o]ne of nature's sanitary engineers"⁴³ and as one of the members of the complex ecosystem that surrounds us. The report of the beetle's simple life is lively and entertaining. "The [beetle's] larvae rear up and stroke the jaws of their parents to get breakfast. 'It's traditional family values. . . . You don't see that much with insects.'"⁴⁴ As simple as this black-and-orange colored beetle's life may be, this species has been slowly disappearing from the earth. On July 13, 1989, the American burying beetle was placed on the endangered species list.⁴⁵ As a consequence of the listing, the Act then took all necessary measures to protect this species. The alleged victims are the innocent humans residing near the beetle's habitat.

In Chapter Four, entitled "Uncooking the Frog," the authors investigate the efforts to preserve the Karner Blue butterfly in upstate New York, sympathetically focusing on the hardships imposed on the residents of the same area. The portrayal of the Karner Blue's development from the caterpillar stage to the grand butterfly is informative and extremely interesting. The "Karner Blue caterpillars survive long enough to metamorphose into smooth green chrysalides that resemble exotic nuts. . . . In late May, the adult butterflies crack open their caskets like miniature Draculas and unfold their blue-violet wings."⁴⁶ With such personal and descriptive insights into the butterfly's maturation, it seems as if Mann and Plummer have both studied the insect for many years. However, they do not write about the butterfly to feed our quest for knowledge but rather to dramatize yet another example of the complexities involved in lessening the threat to biodiversity and the endless impact on the lives of another species: the human.⁴⁷ The butterfly story ends with the feeling that by saving

⁴³ MANN & PLUMMER, *supra* note 7, at 8.

⁴⁴ *Id.* at 9.

⁴⁵ *Id.* at 21.

⁴⁶ *Id.* at 87.

⁴⁷ The book contains many metaphors, some of which border on the ridiculous, describing the human situation:

[T]o maintain this population of Karner Blues, they [the Albany, New York residents and conservationists] will have to do that good job forever. *Forever* is a sobering thought. A store in the mall advertised trinkets from the television series *Star Trek*:

an endangered species, whose ancestors have constantly "flirt[ed] with extinction,"⁴⁸ many people's lives will be forever worsened. By saving all species, like the Karner Blue, banks will be shut down, as well as golf courses, shopping malls, parking lots, and gas stations while "the costs to people's hopes and dreams rise to ever more unacceptable heights."⁴⁹ Thus, applying the Cooked Frog Problem to the human need for economic development, the authors would have us believe that "[s]aving all species everywhere would cook our society to death."⁵⁰

The problem with the Karner Blue story is that the authors mislead by subtly mixing facts with pure speculation.⁵¹ For example, after hearing about the butterfly, the authors came across the Federal Register listing of it as endangered and asked "what saving it might mean for the people nearby (surely most of them had never heard of it)."⁵² It appears that the authors are trying to demonstrate the insignificance of the butterfly's existence by asserting that nobody was even aware of its existence before its listing.

Another example of the authors' speculative claims involves the extreme impact that saving the species *might* have upon society and the authors' belief that so much money would be spent on "just one subspecies."⁵³

Over the next several chapters, Mann and Plummer continue their attempt to prove that humans should tolerate the Earth's endless number of imminent extinctions. They do so by illustrating the human plight and sacrifice involved in saving the whooping crane in several parts of the country, the black-capped vireo and the golden-cheeked warbler in Texas, and, of course, the infamous snail darter in Tennessee.

The cranes are beautifully described as graceful, committed birds that have caught the attention of the implementers of the Endangered Species Act.

The Next Generation. The show takes place in the twenty-fourth century. *Forever* means that even as the starship *Enterprise* warps through interstellar space, a shopping mall in Albany, New York, will be hiring people to cut down aspen and knapweed. A distant descendant of today's security guard will patrol the fence.

Id. at 107.

⁴⁸ *Id.* at 89

⁴⁹ *Id.* at 113.

⁵⁰ *Id.*

⁵¹ There appears to be a fine line between fact and speculation and too often it is difficult to decipher whether a statement is pure fiction or demonstrated fact. For example, the authors describe, in great detail, the taxonomy of the Karner Blue, *Lycacaeides melissa samuelis*. *Id.* at 88. However, without specific source citation, they then describe the cost of saving the butterfly. "The cost *would* be billions of dollars. It *would* be even more if we insist on including the territory currently occupied by Chicago, Toledo, Albany, and the other cities that sit on land that once contained Karner Blues." *Id.* at 110 (emphasis added). The reader is left pondering whether the latter possibility has, indeed, been realized or whether it remains speculation.

⁵² *Id.* at 87.

⁵³ *Id.* at 110.

In nesting season, they hardly make a sound except to warn of danger. Couples mate for life, migrating year after year from their winter quarters to the same northern rookery . . . Unaware of us, the birds walked with the intelligent gravity of the benign aliens in a science fiction film. Their yellow gaze was cool, quick, and remote.⁵⁴

Mann and Plummer portray these birds as beautiful and valuable in and of themselves. However, their purpose is to demonstrate that these birds, like many other species, have no "real" value to the intricate web of life or to the demanding needs of humans. Therefore, since many *individual* species have no value,⁵⁵ the authors daringly pose the following questions:

We discard useless pieces of paper as they build up around the house—why not useless species, which have built up around the planet? Why not get rid of any species that end up getting in the way? If the value of the oil beneath Aransas soars, why shouldn't we kill the last whoopers?⁵⁶

It is apparent that the authors' definition of value is mostly economic, although they never actually admit to such a belief. The authors do imply that there are other reasons why people protect wildlife, but they eventually return to their belief that animals primarily have utilitarian values.⁵⁷ For example, in describing the crane's "value," they measure the value in a clearly utilitarian and economical manner: "Everyone may agree that, from an ethical point of view, protecting the whooping crane is a good thing to do. But they can also agree that the same protection is, pragmatically speaking, a costly, even losing, economic proposition . . . Species would have to pay their way or face extinction."⁵⁸ The authors reject this extreme view but state that "[w]e are forced to admit the value of both economics and ecology."⁵⁹ The authors do not give due recognition to the numerous other value systems held by many citizens. For example, many individuals foster strong environmental ethics and religious grounds for justifying wildlife conservation.⁶⁰

The authors then turn to David Ehrenfeld's Noah Principle⁶¹ of saving species just because they exist and have done so for centuries. However,

⁵⁴ *Id.* at 116-17.

⁵⁵ "The whooping crane *might* be worth saving for its value to tourists. But that type of value surely does not extend to the Karner Blue butterfly or the American burying beetle." *Id.* at 133 (emphasis added).

⁵⁶ *Id.* at 133. Comparing pieces of paper that clutter the house to living creatures is somewhat tenuous.

⁵⁷ *Id.* at 115-46.

⁵⁸ *Id.* at 144-45.

⁵⁹ *Id.* at 145.

⁶⁰ See generally LISA MIGHETTO, *WILD ANIMALS AND AMERICAN ENVIRONMENTAL ETHICS* (1991) (describing the varying types of ethical protection from protection of individual animals to protection of biodiversity); see also Scott Sonner, *Evangelical Group Backs Endangered Species Act*, AP, Jan. 31, 1996, available in WESTLAW, ALLNEWS Database. "People in their arrogance are destroying God's creation, yet Congress and special interests are trying to sink the Noah's Ark of our today—the Endangered Species Act." *Id.* at *1 (quoting Calvin DeWitt, co-founder of the Evangelical Environmental Network).

⁶¹ David Ehrenfeld is an ecologist at Rutgers University and is the founder of the *Conservation Biology* journal. MANN & PLUMMER, *supra* note 7, at 134.

according to the authors, such a utopian principle is unethical and simply overwhelms other human values.⁶² They contend that any reverence for biodiversity should automatically stand alongside other values.⁶³ After an initial reading of this argument, it makes sense that conservation efforts should be practicable and compromising to both the conservation effort and human development. However, the authors portray any conservation efforts as completely destroying any human growth. "It would be wrong . . . if we allowed concern for the environment to destroy someone's aspirations to educate their family, or to live in a safe, comfortable home. . . . 'You're not supposed to starve your children to build the cathedral'. . . ."⁶⁴ Obviously, if such situations do commonly occur, then an intense conflict is present, and hence, a reason for concern. It is unclear whether the conflict scenarios described by the authors are real or merely hypothetical because they do not provide evidence.

Chapter Six, entitled "The Awful Beast is Back," refers to the infamous snail darter that made the headlines in the often-cited Supreme Court case, *Tennessee Valley Authority v. Hill*.⁶⁵ This chapter's focus is the seemingly ridiculous situation in which a tiny freshwater fish "no bigger than a human thumb"⁶⁶ practically stopped the multi-million-dollar Tellico Dam project. To the total bewilderment of the authors, the government, the Endangered Species Committee,⁶⁷ and even the highest court of the land lent their relentless support to this tiny, almost unnoticeable fish. The authors depict the Tellico Dam incident as an extreme example of how the protection of a tiny endangered species was unethically placed above all other concerns. They assert that it is hard to imagine "a world in which a tiny fish could stop an almost complete dam. But that is exactly how the world turned out to be."⁶⁸ Their implication that the presence of the endangered fish was the only controversial aspect of the project is misleading.⁶⁹ The Tellico Dam encountered many major

⁶² By placing biodiversity protection as the number-one priority, the government benches other programs such as health, welfare, education, and defense. *Id.* at 133. Once again, the authors cite no specific examples.

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ 437 U.S. 153 (1977).

⁶⁶ MANN & PLUMMER, *supra* note 7, at 147.

⁶⁷ In 1978, Congress amended the Endangered Species Act to include an Endangered Species Committee which could effectively allow extinction of an endangered species, by granting an exemption to a project if the project's benefits "clearly outweigh the benefits of alternative courses of action consistent with conserving the species or its critical habitat, and [the action] is in the public interest." 16 U.S.C. § 1536(h)(1)(A)(ii) (1994). The committee consists of the Secretary of Agriculture, the Secretary of the Army, the Secretary of the Interior, the Chairman of the Council of Economic Advisors, the Administrator of the Environmental Protection Agency, the Administrator of the National Oceanic and Atmospheric Administration, and a representative from each of the affected state(s). *Id.* § 1536(e)(3).

⁶⁸ MANN & PLUMMER, *supra* note 7, at 148.

⁶⁹ *Tennessee Valley Authority* was not merely an extreme example of species protection. The case raised a controversy that involved a broad and complex range of issues, from accusations that the project was nothing more than a wasteful, destructive, "pork-barrel" endeavor, to constitutional claims of Indian land rights, to claims that the dam was an ex-

obstacles,⁷⁰ but the Endangered Species Act was the one that succeeded in significantly delaying the project. In addition, the dam cost an estimated eight hundred million dollars in subsidies alone, and that did not include the basic construction costs.⁷¹ There were numerous economical reports prepared for the Tellico Dam; not one of them concluded that the dam was more profitable than another development option for the river.⁷² Undeniably, the Tellico Dam project was economically unsound and did not demonstrate common sense decision-making. However, the authors conveniently overlook the other controversies that surrounded the project to focus on the endangered species issue. Throughout the book, the authors offer more examples to support their view that endangered species policy decisions irresponsibly ignore cost-benefit considerations.

The authors describe with equal enthusiasm the human havoc caused by the conservation efforts on behalf of the black-capped vireo and the golden-cheeked warbler. Conservation efforts, such as habitat conservation plans, are described as inflexible and disrespectful of any human interest. The reader learns that the Austin, Texas plan for developing a scientifically-based effort to save the warbler was intended to balance development with endangered species protection. However, the authors state that "all the ecological fieldwork, computer simulations, and geographic information systems behind the Austin plan ignored the values of the people whose lives it would change."⁷³ According to the authors, the entire planning process produced nothing more than constant squabbling among the governmental representatives, developers, and environmentalists.

In sum, the authors attempt to demonstrate the inflexibility of the U.S. efforts in preserving its wildlife. Unfortunately, the evidence is misleading because they carefully avoid presenting all of the issues. Instead of rebutting opposing arguments, the authors simply brush them aside or infer that none exist. The authors, with carefully selected stories tactics, thus create an unconvincing basis for their conclusion that the Endangered Species Act of 1973 has completely failed. The incoming tide of extinction—if it exists—has continued to advance despite the Act. Their narrative case histories are subtly but significantly misleading, and their political proposal is unpersuasive, leaving many important questions unanswered.

treme example of unfettered, irrational decision-making. Zygmunt J.B. Plater, *In the Wake of the Snail Darter: An Environmental Law Paradigm and its Consequences*, 19 U. MICH. J.L. REF. 805, 806 & n.2, 810 (1986).

⁷⁰ See *supra* note 69.

⁷¹ See Plater, *supra* note 69, at 809 n.14.

⁷² The reviews were from varying interest groups, including the General Accounting Office Tellico Project Report and the God Committee Staff Report. *Id.* at 816 n.38.

⁷³ MANN & PLUMMER, *supra* note 7, at 177. The warbler's protection involved a great deal of political controversy between Texas Governor Ann Richards and challenger George Bush, Jr. The general miscommunication between the landowners and the government agencies caused more problems than the proposal that the warbler should be protected. See DEFENDERS, *supra* note 15, at 22-23.

Conclusion

Noah's Choice: The Future of Endangered Species discusses a popular topic of current concern. The book is entertaining to read, much like a short novel. The authors make it clear that they do not favor the Endangered Species Act and its opposition to unnatural species extinction. However, it is unclear whether they genuinely have any concern for non-human life on Earth in general, especially for life which has no apparent economic value to humans. The authors do not adequately support their arguments that the extinction crisis may not exist and that individual species are not as valuable as scientists claim. It is pure arrogance to baldly assert that the extinction dilemma does not exist or that individual species are not important to the whole ecosystem merely because scientists are as yet unable to produce solid evidence proving their value.

Criticism that stimulates the affected parties to examine their conclusions and motives should be acknowledged and welcomed. Unsound criticism and misleading scenarios, however, only add unnecessary conflict to the already difficult biodiversity debate. The authors strive to demonstrate how enforcing the Act as it exists supplants human values. Unfortunately, not all readers will know enough about endangered species issues to decipher the truth from the fiction. The authors also largely overlook the values, other than economic, that citizens place on the protection of wildlife and humans. The fact that the Act has been in existence for more than twenty years and that ecotourism is flourishing⁷⁴ is evidence of what many people want. If the authors would have their way, the Act would be cast aside to play God by deciding which species may be allowed to become extinct. As Aldo Leopold reminds us,

If the land mechanism as a whole is good, then every part is good, whether we understand it or not. If the biota, in the course of aeons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering.⁷⁵

Apparently, Messrs: Mann and Plummer, following their political agenda, claim that there is no risk involved in tinkering with the existence of many endangered species. However, many readers with other values believe the risk exists and would rather not take it.

⁷⁴ See, e.g., Michael Ray Taylor, *The Age of Ecotourism*, WILDLIFE CONSERVATION, Mar./Apr. 1994, at 11, 14-18 (discussing the business of ecotourism).

⁷⁵ ALDO LEOPOLD, A SAND COUNTY ALMANAC 190 (1966).

