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Nearly Extinct in the Wild: The Vulnerable Transparency of the Endangered Species List

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Abstract

This article reconstructs the Endangered Species Act as a government information statute. That Act makes use of an official list of vulnerable creatures that is used for agency action to save them from extinction. This article argues that the official list of species is not sufficiently accurate or transparent to citizens, so the compilation of that list does not satisfy the public interest goals of American environmental law or government transparency policy.

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I. Introduction

The Endangered Species Act (ESA) in the United States¹ seeks to save animals and plants from extinction. The Act is popular among environmentalists who wish to prevent the loss of the Earth's creatures forever, but it is loathed by development interests due to its mandate for protecting such creatures by outlawing damage to their habitats. This Act is dependent upon a deceptively vulnerable item of government-held information: an official list of creatures that have qualified for protection.² This list, the management of which is mandated by the ESA³ and under the purview of the U.S. Fish & Wildlife Service⁴ and the National Marine Fisheries Service,⁵ includes more than 1,000 animals and plants as of early 2021. These creatures have been deemed by scientists as *threatened* or *endangered* due to low population numbers. The ESA seeks to preserve the existence of those species by preventing destruction of their habitats.⁶

The ESA has generated many court disputes and public controversies, most of which revolve around development projects that threaten habitats. Much less attention has been paid to the list of creatures whose imperiled existence generates those disputes. There is little legal research on the transparency and accountability of the government officials who manage the list and whose activities are governed by it. The list is an item of government-held information that should be subjected to the transparency and disclosure philosophy embodied in the Freedom of Information Act,⁷ and several environmental statutes that followed in its wake. The Endangered Species Act itself contains additional requirements for the furnishing of documents by regulated parties, citizen access to government meetings, and public participation in regulatory processes.⁸

The process of adding a creature to the official list, and thus mandating its protection, can be heavily politicized with poorly reported transparency issues. That list can be useful to citizens with ethical concerns about creatures that may be on the brink of disappearing forever, or more immediate concerns about development projects in pristine areas. However, the presence of a creature on that list, or the absence of a creature that *should* be on it, is often not the result of objective science. Political controversy can lead to the listing or delisting of particular species for reasons far removed from the science of habitat health and population levels. Furthermore, scientific uncertainty prevents many deserving creatures from being listed, and previously listed species can be removed from the

¹ 16 U.S.C. §§ 1531-1544 (1973).

² The Endangered Species Act envisioned one comprehensive list of vulnerable creatures. However, there are now two lists: one for plants and another for animals. *See infra* note 51. To avoid awkwardness, this article simply uses the generic term *list*. Also, those two documents do not have official titles, and are only referred to in the statute by the generic term *list*. 16 U.S.C. § 1533(c). To avoid vagueness, this article uses “endangered species list” and similar descriptive phrases that are found in research articles and court documents, but those phrases are not official titles. Also, despite common use of the term “endangered species list,” the list includes both *endangered* and *threatened* creatures. *See infra* notes 40-41.

³ 16 U.S.C. § 1533(c)(1).

⁴ The U.S. Fish & Wildlife Service is within the Department of the Interior and enforces federal statutes and regulations that are relevant for wildlife and natural habitats, with a traditional focus on environmental conservation in the public interest. *See* U.S. Fish & Wildlife Service, *Conserving the Nature of America*, <https://www.fws.gov/>.

⁵ The National Marine Fisheries Service is within the Department of Commerce and manages the populations of marine creatures not just for purposes of environmental conservation, but to maintain sustainable economic markets for such creatures. *See* NOAA Fisheries, *About Us*, <https://www.fisheries.noaa.gov/about-us>.

⁶ 16 U.S.C. § 1533(a)(4).

⁷ 5 U.S.C. § 552 (1966).

⁸ *See e.g.*, Thomas I. Emerson, *Toward a General Theory of the First Amendment*, 72 YALE L.J. 883 (1963); Vivek Ramkumar & Elena Petkova, *Transparency and Environmental Governance*, in THE RIGHT TO KNOW: TRANSPARENCY IN AN OPEN WORLD 282 (Ann Florini ed., 2007).

list regardless of whether their populations have recovered to healthy levels. Meanwhile, obscure processes of administrative law have stifled citizen oversight of the list's accuracy and the accountability of the officials who manage it.

This article reconstructs the Endangered Species Act as an informational statute with unresolved problems of transparency and accountability. The next section will introduce the provisions that make the Endangered Species Act an informational statute. The subsequent section will discuss the trend in which American courts have neglected the higher goals of the ESA and have adopted a focus on procedural minutiae that reduces citizen oversight of the official list. Next, the article will examine the history of court disputes over creatures that have been added to the list or removed from it for politicized or non-scientific reasons. The article concludes with a discussion of whether the endangered species list is sufficiently transparent and accountable, not just as a matter of American law, but as a matter of public interest in saving creatures from extinction.

II. Informational requirements in American environmental law

When it was enacted in 1973, the Endangered Species Act (ESA) fit into two different statutory trends of its era. The ESA is a key component of a wave of tough environmental laws passed in the early 1970s, when legislators were creating vast governmental solutions to nationwide problems that had overwhelmed local laws.⁹ This rush of environmental protection was an offshoot of the civil rights era,¹⁰ when lawmakers tackled racial injustice and inequality with expansive statutes that created entire new federal agencies with large enforcement budgets. The political momentum generated by the civil rights statutes inspired lawmakers to tackle other massive problems in the next round of legislation, with the environment being the next issue of interest.¹¹

In a lesser-known trend, the Endangered Species Act and its environmental brethren also flowed from a new outlook on the transparency and accountability of federal government agencies, enshrined in the Freedom of Information Act (FOIA) of 1966.¹² The passage of FOIA revolutionized American government transparency by mandating that all documents should be freely available to citizens unless agency personnel could successfully argue that a particular document should remain secret.¹³ This in turn inspired a new outlook on the public policy process, in which the generation of documents on many regulatory topics became compulsory while citizens could exercise oversight of politicians and regulators via easy access to those documents.¹⁴ Some policy areas were subjected to information-intensive overhauls, with environmental policy being among the earliest. A new method of federal lawmaking arose in which aspirational statutes overhauled agency decision-making processes via information management requirements and increased public participation.¹⁵

⁹ See Jack Lewis, *Looking Backward: A Historical Perspective on Environmental Regulations*, 14 EPA JOURNAL 26 (Mar. 1988). Federal environmental statutes originated in the late 1800s, but prior to the early 1970s they were limited to particular issues of land/resource use and did not address pervasive problems like air pollution or deforestation. The much more expansive laws of the 1970s will be discussed *infra*.

¹⁰ See RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 47-66 (2004).

¹¹ *Id.* at 67-97.

¹² 5 U.S.C. § 552 (1966).

¹³ S. REP. NO. 813-89 (1965); H. REP. NO. 1497-89 (1966). For general histories of the trends that led to the passage of FOIA, see generally Martin E. Halstuk & Bill F. Chamberlin, *The Freedom of Information Act 1966-2006: A Retrospective on the Rise of Privacy Protection Over the Public Interest in Knowing What the Government's Up To*, 11 COMM. L. & POL'Y 511 (2006); Glen O. Robinson, *Access to Government Information: The American Experience*, 14 FED. L. REV. 35 (1983).

¹⁴ Halstuk and Chamberlin, *supra* note 13, at 531.

¹⁵ See E. Donald Elliott, Bruce A. Ackerman, and John C. Millian, *Toward a Theory of Statutory Evolution: The Federalization of Environmental Law*, 1 J. L., ECON. & ORG. 313, 333-338 (1985).

In the environmental realm, the burgeoning push for big solutions to big problems, and the concurrent push for the transparency of the government officials involved, were embodied in the National Environmental Policy Act (NEPA) of 1970.¹⁶ This statute mandated not just environmental protection, but the proper management of information *about* that protection, allowing citizens to review how well their government protects the natural world.¹⁷ NEPA is a procedural statute that regulates the activities of the entire federal government to achieve national environmental goals.¹⁸

NEPA was the first major federal statute that required not just the management of information, but the creation of it by regulated parties. The most important such requirement is the creation of an Environmental Impact Statement (EIS), which must be completed for any environmentally relevant project conducted by any government agency or any private party that it regulates. The statute mandates the scientific specificity of such documents in great levels of detail.¹⁹ The EIS must be approved by the regulatory agency in question, compiled and stored by the Environmental Protection Agency, and furnished to any citizen upon request. Public comments and other types of citizen participation are required throughout the entire process.²⁰ This made NEPA a groundbreaker in subject matter-oriented government transparency requirements.²¹

The public participation and transparency philosophies of NEPA have been incorporated into most subsequent federal environmental statutes, which have also introduced their own specific information management mandates. Following on the heels of NEPA, Congress passed the much more specific Clean Air Act in 1970²² and Clean Water Act in 1972.²³ These statutes introduced extensive new permitting requirements for industrial operators, and mandated periodic reports on their ongoing activities.²⁴ This creates significant amounts of information on the identities of polluters, and the nature and amount of their pollution, all of which are recorded in government-held documents that must be made available to the public upon request.²⁵

Some subsequent environmental statutes, including the Endangered Species Act, introduced a third type of government-managed environmental information: official lists that are intended to inform government funding plans, mitigation efforts, enforcement against violators, and oversight of agency compliance. One noteworthy example is the Comprehensive Environmental Response, Compensation, and Liability Act of 1980,²⁶ popularly known as Superfund, which names toxic dump

¹⁶ 42 U.S.C. §§ 4321-4375 (1970).

¹⁷ See JAMES SALZMAN & BARTON H. THOMPSON, JR., *ENVTL. L. & POL'Y* 45-46 (2003).

¹⁸ 42 U.S.C. § 4331.

¹⁹ 42 U.S.C. §§ 4332(C)(i)- 4332(C)(v). The Supreme Court has ruled that early “pre-decisional” deliberations and documents, partaken before the ultimate regulatory or informational decisions required by environmental statutes, can be withheld from public disclosure per Exemption 5 of the Freedom of Information Act, 5 U.S.C. § 552(b)(5). *United States Fish and Wildlife Service v. Sierra Club*, 141 S.Ct. 777 (2021).

²⁰ 42 U.S.C. § 4332(C).

²¹ The influence of NEPA can be seen in later statutes that mandated the transparency of government-held documents in other subject areas, such as finance and health care. See e.g. ALASDAIR ROBERTS, *BLACKED OUT: GOVERNMENT SECRECY IN THE INFORMATION AGE* 150-170 (2006); Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Transparency*, 112 *HARV. L. REV.* 1197, 1276-89 (1999).

²² 42 U.S.C. §§ 7401-7671 (1970).

²³ 33 U.S.C. §§ 1251-1387 (1972). This statute was originally known as the Federal Water Pollution Control Act, and was renamed the Clean Water Act upon the passage of amendments in 1977. The amendments are codified at Pub. L. No. 95-217, 91 Stat. 1582-1586 (1977).

²⁴ Under both statutes, the resulting information and documents are managed by the Environmental Protection Agency. 42 U.S.C. § 7661; 33 U.S.C. § 1341.

²⁵ The Clean Air Act requires two different types of permits depending on location and specific pollutants, codified at 42 U.S.C. §§ 7470-7492, 7501-7515. Permitting requirements for water pollution were left vague in the original text of the Clean Water Act, but were later codified at 40 C.F.R. § 122.21 (1983).

²⁶ 42 U.S.C. §§ 9601-9675 (1980).

sites and funds cleanup efforts that are often very expensive. These forlorn locations appear in a government-managed list on which unfortunate new discoveries are added and ameliorated sites are removed.²⁷ This type of managed list is also a crucial component of the Endangered Species Act.

The informational philosophy of the Endangered Species Act

In addition to its obvious goals on behalf of vulnerable creatures and the health of the natural world, this article contends that the Endangered Species Act is also an informational statute with transparency and accountability issues concerning the government officials who manage that information. No vulnerable creature will be the focus of any federal protection effort until that creature appears on a list that is itself vulnerable.

The need for federal protection of vulnerable creatures, mostly for reasons of their value to commerce and tourism, came up in 1969 during Congressional debates over the passage of the National Environmental Policy Act (“NEPA”).²⁸ Senator Philip Hart (D-Mich.) proclaimed that rare species should be saved from extinction to “permit the regeneration of species to a level where controlled exploitation of that species can be resumed” because “with each species we eliminate, we reduce the [gene] pool... which may subsequently prove invaluable to mankind in improving domestic animals or increasing resistance to disease or environmental contaminants.”²⁹ Species preservation was left out of NEPA, but the topic remained popular in political discussions, because scientists were beginning to sound the alarm on mass extinctions during this period,³⁰ while ambitious environmental statutes found favor among federal politicians and their constituents.³¹

Meanwhile, scientists had concluded during this period that one of the primary reasons animals and plants become endangered is the destruction of their habitats in favor of human developments. This raised the issue of statutory restrictions on land usage.³² An endangered species protection bill was introduced in 1973, and during debate the House of Representatives reviewed the latest research on the importance of habitat preservation for an endangered species’ survival, while noting that unchecked human construction and development were the main culprits. Representative Leonor Sullivan (D-Mo.) proclaimed that “as we homogenize the habitats in which these plants and animals evolved... we threaten their – and our own – genetic heritage.”³³ It should be noted that the ensuing congressional debate was focused almost entirely on the economic losses that could occur if

²⁷ While outside of the scope of this article, the official list of federally significant toxic dump sites under the Superfund program is particularly prone to secrecy and political manipulation, due to the vast amounts of taxpayer money used to clean up such sites and the potential liability of the original polluters. *See generally* Dashiell Shapiro, *Superdumb Discrimination in Superfund: CERCLA Section 107 Violates Equal Protection*, 2002 U. CHI. LEGAL F. 331 (2002); Martina E. Cartwright, *Superfund: It’s No Longer Super and It Isn’t Much of a Fund*, 18 TUL. ENVTL. L.J. 299 (2005).

²⁸ *See* LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW*, *supra* note 10, at 70-73.

²⁹ S. REP. NO. 91-526 at 3 (1969).

³⁰ The 1962 book *SILENT SPRING* by Rachel Carson alerted nature lovers to the effects of toxic pesticides on birds that eat the targeted bugs. By about 1970, the plight of the charismatic bald eagle and peregrine falcon, the populations of which were declining rapidly for that reason, caught the public’s attention. *See* Martha Williams, *Lessons from the Wolf Wars: Recovery v. Delisting under the Endangered Species Act*, 27 FORDHAM ENVTL. L. REV. 110, 114 (2015).

³¹ *See* MARY GRAHAM, *DEMOCRACY BY DISCLOSURE: THE RISE OF TECHNOPOPULISM* 77-90 (2002).

³² *See* Erica Goode, *A Shifting Approach to Saving Endangered Species*, N.Y. TIMES (Oct. 5, 2015), <http://nyti.ms/1Ng1OzG>.

³³ H.R. REP. NO. 93-412 at 4 (1973). The statute’s original title was the Endangered and Threatened Species Conservation Act of 1973.

charismatic creatures disappeared; for example, Rep. Sullivan cited losses for “furriers and hunters around the world” if big cats like tigers and cheetahs went extinct.³⁴

The Congressional Record from the 1973 debates indicates an attitude toward protecting endangered species that was quite different from the focus on ecosystem health espoused by scientists then and now, not to mention the philosophical and ethical questions raised by environmentalists who despair when beloved animals and plants disappear forever. For instance, the final draft of the Endangered Species Act certainly instructed the U.S. government to ameliorate the destruction of an endangered species’ habitat,³⁵ but the only activities that the Act expressly prohibited involved the commercial transport of such creatures.³⁶ This has caused some members of the judiciary to conclude that the ESA is focused on commerce.³⁷

Nonetheless, the text of the ESA begins with a proclamation on the need to save the world’s creatures from disappearing: “the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction.”³⁸ Under the Act, all federal government agencies and all the private parties they regulate must avoid damaging the “critical habitat”³⁹ of any species that has been deemed “endangered”⁴⁰ or “threatened,”⁴¹ under the rationale that saving such species from extinction is in the public interest.⁴²

For most American animal and plant species, observance of the ESA was placed under the jurisdiction of the U.S. Fish & Wildlife Service (FWS), which is the federal subject matter authority on wildlife management.⁴³ The ESA mandates FWS investigation into any action by federal agencies or their regulated parties that may damage the habitat of any creature that has been placed on the official endangered species list.⁴⁴ That list is itself managed by the FWS, and includes creatures deemed worthy of protection by scientific researchers who work for or with the FWS. Citizens may also petition for the inclusion of a particular species on the list.⁴⁵

³⁴ *Id.* at 5. Note that none of the animals cited by Rep. Sullivan resided in the United States, while elsewhere in her testimony she relied on hypothetical examples like a rare plant that could contain a cure for cancer.

³⁵ 16 U.S.C. §§ 1536(a)(2)-1536(a)(3).

³⁶ 16 U.S.C. § 1538(a)(1).

³⁷ *See e.g.* National Ass’n of Home Builders v. Babbitt, 130 F.3d 1041 (D.C. Cir., 1997). This case arose from a development dispute in California, in which the ESA prevented construction on a coveted land parcel. Judge Patricia Wald ruled that “one of the primary reasons that Congress sought to protect endangered species from ‘takings’ was the importance of the continuing availability of a wide variety of species to interstate commerce.” *Id.* at 1050. In reaching this interpretation, Judge Wald cited the aforementioned congressional testimony by Rep. Sullivan and her use of the term “products.” *See supra* notes 33-34 and accompanying text. The above quote by Judge Wald has since been cited verbatim in *Shields v. Babbitt*, 229 F.Supp.2d 638, 659-60 (W.D. Tex., 2000); and *Rancho Viejo, LLC v. Norton*, 323 F.3d 1062, 1073 (D.C. Cir., 2003).

³⁸ 16 U.S.C. § 1531(a)(4).

³⁹ *Critical habitat* is defined as “the specific areas within the geographical area occupied by the species,” “essential to the conservation of the species,” and “which may require special management considerations or protection.” 16 U.S.C. § 1532(5)(A).

⁴⁰ An *endangered species* is defined as “any species which is in danger of extinction throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6).

⁴¹ A *threatened species* is defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” 16 U.S.C. §§ 1532(20).

⁴² 16 U.S.C. §§ 1531(b)-1531(c).

⁴³ For purposes of brevity, this article assumes that typical government actions toward endangered species are under the purview of the Fish & Wildlife Service. However, recall that some species are managed by the National Marine Fisheries Service; *see supra* note 5.

⁴⁴ 16 U.S.C. § 1533.

⁴⁵ 16 U.S.C. § 1537(a).

Whenever warranted, the ESA requires federal agencies to contact the FWS for expert guidance on species population levels or critical habitats before taking any action during construction and development projects.⁴⁶ For instance, the Federal Communications Commission must contact the FWS whenever issuing permits for antenna towers to be placed along the migration routes of endangered birds, because birds are known to collide with such towers frequently.⁴⁷ The ESA also requires the use of independent scientists,⁴⁸ who not only compile the list of endangered species and determine the locations of critical habitats, but may also issue opinions on the development projects at hand.⁴⁹

Most pertinent for the present article, the contents and management of the official list of endangered species are clearly delineated in the Act's text:

The Secretary of the Interior shall publish in the Federal Register a list of all species determined by him or the Secretary of Commerce to be endangered species and a list of all species determined by him or the Secretary of Commerce to be threatened species. Each list shall refer to the species contained therein by scientific and common name or names, if any, specify with respect to each such species over what portion of its range it is endangered or threatened, and specify any critical habitat within such range.⁵⁰

Note that the original text of the ESA used the term *list* in the singular, but the information has since been split into two lists, perhaps as an unfortunate illustration of the sheer quantity of vulnerable creatures.⁵¹ Those lists are the catalysts for enforcement of the ESA, because the actions of federal agencies and the parties they regulate must not infringe on the habitats of any of the included species. This is usually accomplished via civil lawsuits against agency violations of the ESA, when citizens suspect that an agency and/or its regulated party did not do enough to prevent critical habitat loss during a development project. The FWS and the Department of the Interior can charge administrative penalties against the offending government agencies,⁵² and possibly criminal penalties against private parties that damage protected habitats.⁵³

Thus, the official list of endangered species under the ESA is an item of government-managed information that must be transparent and made available to citizens upon request,⁵⁴ not only per the requirements of the Endangered Species Act itself, but also under the Freedom of Information Act⁵⁵ and the Administrative Procedure Act.⁵⁶ Therefore, the Endangered Species Act can be considered an informational statute. However, disputes over habitat protection under the ESA, the transparency of the list of vulnerable creatures, and the accountability of the officials who manage that list, all fall

⁴⁶ 16 U.S.C. § 1536(a)(2).

⁴⁷ Benjamin W. Cramer, *For the Birds: The FCC and Avian Mortality at Communications Towers*; 14 INFO 3, 6 (2012).

⁴⁸ 16 U.S.C. § 1533(b)(1)(A).

⁴⁹ See SAMUEL P. HAYS, WARS IN THE WOODS: THE RISE OF ECOLOGICAL FORESTRY IN AMERICA 25 (2007).

⁵⁰ 16 U.S.C. § 1533(c)(1).

⁵¹ The list of endangered and threatened wildlife (animals) is found at 50 C.F.R. § 17.11 (1973); the list of endangered and threatened plants is found at 50 C.F.R. § 17.12 (1973).

⁵² 16 U.S.C. §§ 1540(c), 1540(g).

⁵³ 16 U.S.C. §§ 1540(a), 1540(b), 1540(e).

⁵⁴ Whether or not the lists are *transparent* is the focus of the remainder of this article, but the current lists can be easily found online, in many different searchable formats, at the FWS website. See e.g., U.S. Fish & Wildlife Service, ECOS: Environmental Conservation Online System, <https://ecos.fws.gov/ecp/>.

⁵⁵ 5 U.S.C. § 552 (1966).

⁵⁶ 5 U.S.C. §§ 500-706 (1946).

under the rubric of administrative jurisprudence, in which the observance of procedure tends to take priority over the Act's public interest goals.

This pattern of jurisprudence was not considered at the time of the Act's passage. The Endangered Species Act faced little opposition in Congress, with no member of the Senate and only four members of the House of Representatives voting against it. There was also little media coverage when President Richard Nixon signed the law into effect on December 28, 1973.⁵⁷ Little did those lawmakers know how controversial the Act would become. Within just a few years, the ESA would become one of America's most divisive laws, attracting bitter opposition from economic interests while enjoying passionate support from nature lovers.⁵⁸ The inevitable political and legal disputes make the collection and management of accurate and accountable information on vulnerable creatures all the more important.

III. Substantive vs. procedural species protection

Since environmental protection in the United States is performed by executive branch agencies, the activities of those agencies fall under the realm of administrative law. This creates a conundrum because administrative law is by nature reactive, while most environmental protection statutes strive to be proactive.⁵⁹ Government officials are required by these laws to follow mandated procedures, but citizens are relegated to reviewing those procedural activities after the fact and if impropriety is found, initiating court challenges over procedural errors.

Per established administrative procedure, a successful citizen suit against agency malfeasance, while appearing to be a victory in court, often results in a mere "do-over" in which the agency makes minor procedural adjustments (such as issuing a call for citizen comments that it neglected to do the first time), after which the same regulatory decision is often reached. Also, such a courtroom victory typically comes too late to prevent the damage caused by the regulatory decision at issue, even if that decision was made inappropriately.⁶⁰ This conundrum is particularly acute in environmental law, in which an improper agency decision can result in irreparable damage to the natural world, after which concerned citizens can only object to procedural oversights that were made long before.⁶¹

The Endangered Species Act and its brethren are modeled after the procedural requirements of the National Environmental Policy Act,⁶² which requires courts to review the minutiae of procedural compliance at regulatory agencies rather than the public interest-inspired spirit of those statutes. Surprisingly, those substantive goals enjoyed brief support amongst the federal judiciary, exemplified by the first NEPA-related case to reach the Circuit Court level. In the *Calvert Cliffs* ruling of 1971, the D.C. Circuit declared that "NEPA requires agencies [to] consider the

⁵⁷ See SALZMAN & THOMPSON, *supra* note 17, at 255.

⁵⁸ For an analysis of modern critical views of the Act, see generally N. Scott Arnold, *The Endangered Species Act, Regulatory Taking and Public Goods*, 26 SOCIAL PHIL. & POL'Y 353 (2009); Annemarie Monique Taylor, *Death by a Thousand Cuts: Regulatory Takings under the Endangered Species Act*, 26 SAN JOAQUIN AGRIC. L. REV. 261 (2016-2017). For a discussion of recent conflicts between environmentalists and politicians over the interpretation and enforcement of the Act, see Jonathan Wood, *To Recover Endangered Species, Reduce Conflict and Reward Landowners Who Restore Habitat*, THE HILL (Dec. 22, 2020), <https://thehill.com/opinion/energy-environment/530874-to-recover-endangered-species-reduce-conflict-and-reward>.

⁵⁹ See LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW*, *supra* note 10, at 185.

⁶⁰ See Wendy E. Wagner, *Commons Ignorance: The Failure of Environmental Law to Produce Needed Information on Health and the Environment*, 53 DUKE L. J. 1619, 1717-26 (2004).

⁶¹ *Id.* at 1718.

⁶² See *supra* notes 16-18 and accompanying text.

environmental impact of their actions to the fullest extent possible,” and “at every stage where an overall balancing of environmental and nonenvironmental factors is appropriate.”⁶³

This judicial deference to substantive environmental protection would not last much longer. Since *Calvert Cliffs*, the courts have acknowledged the lofty goals of federal environmental protection in an informal fashion, but usually hand down rulings on mundane matters of procedural compliance. A crucial turning point came with the 1980 Supreme Court ruling in the *Strycker’s Bay* case. Here the high court found that if an agency has followed proper statutory procedures when making a regulatory decision on environmental protection, and as long as that decision was not made arbitrarily and capriciously, then the procedural requirements of the environmental statute (NEPA in this case) are satisfied and the agency cannot be culpable for malfeasance.⁶⁴ This established the precedent that the major American environmental statutes do not give judges the authority to overrule agency regulatory decisions unless they were reached after demonstrable procedural errors, nor can judges opine on the environmental quality of those agency actions. Therefore, most American environmental laws allow procedural review but not substantive review.⁶⁵

To put it more bluntly, American environmental statutes allow poor environmental decisions that are based on proper procedures. This is standard administrative law procedure, with the perhaps unintended consequence of sapping the environmental protection goals of these information-intensive statutes by focusing on how information is compiled. In turn, there is much less judicial consideration of whether the resulting information is even accurate or useful to citizen activists and government watchdogs, or whether the ultimate agency regulatory decision reflects the substantive philosophy of the statute in question.⁶⁶ This in turn has an impact on the effectiveness of the Endangered Species Act, because no vulnerable creature will be considered for protection unless it appears on the official list, which is dependent upon those same administrative procedures.

Specifically for the Endangered Species Act, the official list of creatures that is supposed to be the catalyst for federal habitat protection efforts is only ever reviewed by courts if a particular creature’s presence on the list (or lack thereof) was decided via improperly followed procedures. There is little recourse for scientists or nature lovers who doubt the list’s accuracy, and as will be discussed below, the official list is prone to administrative obfuscation and political interference. The ESA’s judicial history raises serious questions about its effectiveness as an information-based statute, the integrity of decisions made while compiling the endangered species list, and the effectiveness of regulatory decisions that are mandated by the list.⁶⁷

⁶³ *Calvert Cliffs Coordinating Comm. v. Atomic Energy Comm’n*, 449 F.2d 1109, 1118 (D.C. Cir. 1971). Some internal quotation marks omitted. The quoted statement refers to 42 U.S.C. § 4332(2)(C), which delineates the Environmental Impact Statement process. This dispute involved a permit for the construction of a nuclear power plant in Maryland, with local citizens believing that the Environmental Impact Statement required by NEPA had been compiled inappropriately. The court ultimately ordered the Atomic Energy Commission to correct some procedural errors in the compilation of the document, after which the facility was built.

⁶⁴ *Strycker’s Bay Neighborhood Council v. Karlen*, 444 U.S. 223, 227 (1980). This case involved an allegedly faulty Environmental Impact Statement compiled by the Department of Housing and Urban Development for a low-income housing project in New York City that was opposed by local residents. “Arbitrary and capricious” decision-making by government agencies is prohibited under the Administrative Procedure Act, 5 U.S.C. § 706 (2)(A).

⁶⁵ See SALZMAN & THOMPSON, *supra* note 17, at 277.

⁶⁶ Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government’s Environmental Performance*. 102 COLUMBIA L. REV. 903, 909-916 (2002).

⁶⁷ The following judicial history *infra* does not cover all the provisions of the Endangered Species Act, but focuses on rulings that are relevant to the list of vulnerable creatures. The majority of ESA disputes involve the management of a particular creature’s habitat, particularly if it includes privately-owned land. For an introductory list of cases, see The National Agricultural Law Center, *Case Law Index Endangered Species Act*, <https://nationalaglawcenter.org/aglaw-reporter/case-law-index/esa/>.

Snail darters and the Hand of God (Squad)

The sweeping environmental protection statutes of the early 1970s briefly enjoyed some judicial deference to their lofty goals, but the honeymoon soon came to an end when the regulatory ramifications⁶⁸ and seemingly unattainable goals⁶⁹ of those statutes became the topics of court disputes. Just a few years after its passage, the ESA became the impetus for a bitter legal and political feud that persists to the present day. The public interest in preservation of the natural world was pitted against economic and development interests, with politics defining the sides and obstructing compromise.⁷⁰ By the late 1970s, opponents of the new environmental protection regime found an opportunity in a judicial injunction against the construction of a dam in Tennessee. When the potential power of the ESA became evident, anti-regulation interests engaged in a battle to impugn the ESA and environmental law in general, in ways from which the spirit of federal environmental protection has never quite recovered.⁷¹

A homely little fish called the snail darter, which in the 1970s lived only in a few rivers in eastern Tennessee, was the unlikely catalyst for this turning point in American environmental jurisprudence.⁷² The Tennessee Valley Authority (TVA) began to construct Tellico Dam on the Little Tennessee River in 1967, several years before the advent of the Endangered Species Act. Members of a local chapter of Environmental Defense Fund opposed the project; they had little statutory recourse but managed to stall construction for a few years. Shortly after the National Environmental Policy Act went into effect in 1970, the citizens' group sued for procedural violations in the compilation of the project's Environmental Impact Statement. This merely enabled another delay in construction. Illustrating the emerging procedural focus of the courts toward environmental statutes, the TVA was instructed to prepare an appropriate document and then plans for construction were allowed to proceed.⁷³

The year after that temporary victory in court, the newly passed Endangered Species Act gave the citizens' group a more powerful statutory weapon. The previously unknown snail darter was discovered by a biologist in the Little Tennessee River in 1973, shortly before the ESA went into

⁶⁸ The shift in attitudes toward the early-'70s statutes is often attributed to the changing outlook of President Richard Nixon. Upon first taking office in 1969, Nixon supported environmentalism, though this may have been for reasons of political expediency rather than personal belief. The National Environmental Policy Act, Clean Air Act, Clean Water Act, and Endangered Species Act were all signed into effect by Nixon, and the Environmental Protection Agency was established during his administration. By the beginning of his second term in 1973, Nixon began to criticize the increase in governmental power enabled by those statutes, and he re-aligned himself with industrial and business interests who objected to the supposedly onerous new environmental requirements. Nixon's shift foreshadowed the end of America's support for sweeping civil rights-inspired statutes for the environment and other matters of the public interest. See J. BROOKS FLIPPEN, *NIXON AND THE ENVIRONMENT* 199-214 (2000).

⁶⁹ See LAZARUS, *supra* note 10, at 190.

⁷⁰ See e.g. Dale Deborah Brodkey, *The Snail Darter v. The Tennessee Valley Authority: Is the Endangered Species Act Endangered*, 66 KENTUCKY L.J. 363 (1977); David D. Freudenthal, *Snail Darters—A Threat to Private Use of the Public Domain—Tennessee Valley Authority v. Hill*, 14 LAND & WATER L. REV. 105 (1979).

⁷¹ See Riley E. Dunlap, *Public Opinion and Environmental Policy*, JAMES P. LESTER, ED. 2 ENVIRONMENTAL POLITICS AND POLICY: THEORIES AND EVIDENCE 63-114 (1997).

⁷² The snail darter (*Percina tanasi*) is in the minnow family, reaches a maximum of three inches in length, and is light brown with dark gray spots. It is only known to inhabit the upper tributaries of the Tennessee River. The FWS first listed the snail darter as *endangered* in 1975, and its status was upgraded to *threatened* in 1984. See U.S. Fish & Wildlife Service, *Snail darter (Percina tanasi)*, <https://ecos.fws.gov/ecp/species/5603>. An organization of independent scientists, the International Union for Conservation of Nature (IUCN), currently lists the snail darter as *vulnerable*. See International Union for Conservation of Nature, *Snail darter (Percina tanasi)*, <http://www.iucnredlist.org/details/16595/0>.

⁷³ *Environmental Defense Fund v. Tennessee Valley Auth.*, 339 F. Supp. 806 (E.D. Tenn. 1972).

effect, and was determined to be of a dangerously small population.⁷⁴ Upon learning of the snail darter and its prospects for survival, the U.S. Fish & Wildlife Service added the fish to the official endangered species list in 1975.⁷⁵ By this point, construction of Tellico Dam was partially complete, but opponents finally had solid statutory support for shutting down the project, because it would disrupt the flow of the river that was the only home of the endangered snail darter. The resulting dispute soon reached the federal courts, and the Sixth Circuit shut down construction in 1977 per the habitat protection requirements of the Endangered Species Act.⁷⁶ The TVA appealed the injunction to the Supreme Court, and in *Tennessee Valley Authority v. Hill* the following year,⁷⁷ the high court upheld the injunction and ruled that the construction of Tellico Dam violated the Endangered Species Act.⁷⁸ This case was the first indication of the significant power of the ESA, and the construction project was shut down until a solution to the snail darter's imminent extinction was found.⁷⁹

However, this turned out to be a temporary victory for environmentalists and other opponents of Tellico Dam, because Congress intervened almost immediately after the Supreme Court ruling. At the behest of the dam's supporters and critics of burdensome environmental regulations, in 1978 Congress quickly passed an amendment to the ESA that allowed particular construction projects to be exempted from the Act's habitat protection requirements by vote of a special committee.⁸⁰ In a dissent to the *Tennessee Valley Authority* decision, Supreme Court Justice Lewis F. Powell predicted this type of reaction from Congress.⁸¹ Known colloquially as the "God Squad"⁸² and composed of representatives from several Cabinet-level departments,⁸³ this committee immediately voted to arbitrarily exempt Tellico Dam from the requirements of the ESA.⁸⁴ Tellico Dam was completed and went into operation just one year later in 1979.

The God Squad's arbitrary decision-making process should raise questions about the transparency of the official endangered species list, its scientific accuracy, and the accountability of the officials who decide which creatures to include in that list and whether or not they receive full protection (as the snail darter did not). This in turn should create doubt about whether the Endangered Species Act can function as Congress originally intended—as a means to preserve plants and animals from extinction by highlighting their needs for protection.

Ironically, both Tellico Dam and the snail darter survived the controversy that pitted them against each other. During the battle over construction, biologists relocated some specimens of the snail darter to other rivers in the region, and populations became established in additional areas of

⁷⁴ U.S. Fish & Wildlife Service, The Snail Darter Recovery Team, *Snail Darter Recovery Plan* (Dec. 17, 1982), <https://www.nrc.gov/docs/ML1217/ML12173A447.pdf>, at 2.

⁷⁵ See U.S. Fish & Wildlife Service, *Snail darter*, *supra* note 72.

⁷⁶ *Hill v. Tennessee Valley Authority*, 549 F.2d 1064, 1069 (6th Cir. 1977).

⁷⁷ 437 U.S. 153 (1978).

⁷⁸ *Id.* at 172-174.

⁷⁹ *Id.* at 167-168.

⁸⁰ Pub. L. 93-632, 92 Stat. 3751 (1978). This amendment authorized a special Cabinet-level committee, officially known as the Endangered Species Committee, as an amendment to the ESA at 16 U.S.C. § 1536(e), with the procedures for finding an exemption codified at §§ 1536(g)-1536(h).

⁸¹ 437 U.S. 210.

⁸² The source of the nickname "God Squad" is difficult to determine, but environmentalists generally decry this committee's ability to decide the fate of endangered creatures as if it has no higher authority. See Ted Gup, *Down with the God Squad*, TIME (Nov. 5, 1990), <http://content.time.com/time/subscriber/article/0,33009,971548-1,00.html>.

⁸³ The Endangered Species Committee ("God Squad") includes representatives from the Environmental Protection Agency, National Oceanic and Atmospheric Administration, Council of Economic Advisers, Department of Agriculture, Department of Defense, and Department of the Interior; plus an official from the state containing the contested habitat. 16 U.S.C. § 1536(e)(3).

⁸⁴ Jared des Rosiers, *Exemption Process under the Endangered Species Act: How the God Squad Works and Why*, 66 NOTRE DAME L. REV. 825, 845-46 (1991).

Tennessee, Georgia, and Alabama. This allowed the fish's status to be upgraded from *endangered* to merely *threatened* in 1984.⁸⁵ By 2019, biologists believed that the snail darter had increased in population enough to no longer need federal habitat protection under the Endangered Species Act.⁸⁶

Private interests strike back

The snail darter dispute was a harbinger of the further erosion of substantive federal environmental protection in the following years. Starting in the 1980s, a newly conservative Supreme Court began to roll back the big public interest protections of the previous decade, and transitioned toward a focus on the rights of private property owners. This transition was inspired not only by broad changes in America's political stances during the Reagan era,⁸⁷ but by the reaction to the controversial *Tennessee Valley Authority* decision, as well.⁸⁸

For citizens and scientists concerned about endangered species, their access to information about how federal agencies comply with the ESA was damaged by an esoteric and confusing ruling from the Eighth Circuit in 1989. This ruling weakened the transparency and accountability of efforts to place vulnerable creatures on the official endangered species list and to manage the ensuing habitat protection efforts. This is because the judiciary formulated a focus on procedural minutiae rather than substantive public interest goals.

In the *Defenders of Wildlife* case,⁸⁹ a wildlife conservation group accused the Environmental Protection Agency of violating several different federal statutes when it made a regulatory decision to authorize the agricultural use of certain pesticides containing strychnine. The concern was that these poisons would affect not just pests, but other animals—primarily birds, including some that could be endangered—higher in the food chain that fed upon those pests. Defenders of Wildlife claimed that the EPA violated the Federal Insecticide, Fungicide, and Rodenticide Act,⁹⁰ which directly regulates such use of pesticides, plus statutes covering the apparently affected animals including the Bald and Golden Eagle Protection Act,⁹¹ the Migratory Bird Treaty Act,⁹² and the Endangered Species Act.

The primary source of the dispute was that the EPA made the regulatory decision on pesticides without holding a public administrative hearing.⁹³ The EPA claimed that certain parties, including environmentalists, need not be invited to such meetings because they could request judicial

⁸⁵ See U.S. Fish & Wildlife Service, *Snail darter*, *supra* note 72.

⁸⁶ See *Petition Seeks to Remove Snail Darter from Endangered Species List, Marking Conservation Success*, Center for Biological Diversity, press release (July 16, 2019), <https://biologicaldiversity.org/w/news/press-releases/petition-seeks-remove-snail-darter-endangered-species-list-marking-conservation-success-2019-07-16/>.

⁸⁷ See Richard J. Lazarus, *The Greening of America and the Graying of United States Environmental Law: Reflections on Environmental Law's First Three Decades in the United States*, 20 VA. ENVTL. L.J. 75, 85-87 (2001).

⁸⁸ See Zygmunt J. B. Plater, *In the Wake of the Snail Darter: An Environmental Law Paradigm and Its Consequences*, 19 U. MICH. J.L. REFORM 805, 825-30 (1986).

⁸⁹ *Defenders of Wildlife v. Administrator, Environmental Protection Agency*, 882 F.2d 1294 (8th Cir. 1989).

⁹⁰ 7 U.S.C. § 136 (1972). This act regulates the use of pesticides in agriculture in the interests of protecting consumers and the environment. 7 U.S.C. §§ 136(x), 136(bb).

⁹¹ 16 U.S.C. § 668 (1940). This act prohibits the hunting of the two eagle species and other harms to individual specimens. 16 U.S.C. § 668(a).

⁹² 16 U.S.C. §§ 703-712 (1918). This act was the first American statute that protected a family of animals purely for their aesthetic and environmental value. The act originated with a 1916 treaty between the United States and United Kingdom (acting on behalf of Canada in international affairs) to limit the rampant hunting of large flocks of birds that migrated across the US/Canada border. See Hye-Jong Linda Lee, *The Pragmatic Migratory Bird Act: Protecting "Property"*, 31 B.C. ENVTL. AFF. L. REV. 649, 652-53 (2004).

⁹³ 882 F.2d 1298. Such meetings are required per the Administrative Procedure Act at 5 U.S.C. § 706(2)(A).

review of the resulting regulatory decisions later.⁹⁴ Defenders of Wildlife responded that this procedural stance violated both the proactive spirit of environmental law and the procedural transparency required by the Administrative Procedure Act, as the EPA could make non-transparent decisions that violated procedural requirements, and citizens would have to clean up the mess later.⁹⁵

The Eighth Circuit discussed the procedural requirements of the other statutes that the EPA had been accused of violating,⁹⁶ but this article will focus on the court's discussion of the Endangered Species Act. That statute includes its own clear mandate for judicial review and administrative relief of violations by any agency that fails to consider the needs of vulnerable creatures, and it allows any interested citizen to initiate a civil suit against an agency for violations of the Act.⁹⁷ In an initial victory for the wildlife lovers, the Eighth Circuit ruled that the EPA's decision on pesticide use was possibly a violation of the Endangered Species Act and was ripe for a civil suit brought by citizens. The EPA was enjoined from codifying the decision until it could prove that the Endangered Species Act had *not* been violated.⁹⁸

However, this ruling only acknowledged that citizens can fight an agency's environmental regulatory decision *after* it has been made, and by the time citizens can bring a suit, it is entirely possible that environmental damage will have been done. Once again, the proactive spirit of American environmental law was subsumed by reactive procedural minutiae, and a bad agency decision could only be rectified after the fact by an order to go back and do the procedure correctly, which could very well lead to the same damaging regulatory decision but this time backed up by proper paperwork. The Eighth Circuit's ruling in the *Defenders of Wildlife* case shows no internal awareness of the procedural quagmire that it unleashed.⁹⁹ A threat of judicial review later is a questionable motivation for an agency to act transparently now, and concerned citizens must later rely on contorted procedural arguments to prove that the agency did *not* act transparently. Even though it was only a circuit court case, under the *Defenders of Wildlife* ruling the presence of vulnerable creatures on the official endangered species list did not ensure the protections intended by Congress when it passed the ESA. This convoluted focus on procedures soon reared its head at the Supreme Court as well.

By the early 1990s, the Supreme Court had issued a series of rulings that damaged the public interest rationale of American environmental law, with the Endangered Species Act weakened by association. First, the high court adjusted its views on the standing of environmental activists and other interested citizens when claiming that an environmental statute had been violated. Back in the early 1970s, the high court had ruled that activists with general knowledge of environmental protection did not need to demonstrate "injury in fact" and could act on behalf of the public, even if a volunteer group had no presence in the affected location.¹⁰⁰ The conservative turn in American politics led the high court to rethink this concept by the early 1990s. Two initially unrelated cases

⁹⁴ *Id.* at 1297. The EPA's claim about not inviting certain parties to meetings was supported by a precedent from a different circuit court: *Environmental Defense Fund v. Costle*, 631 F.2d 922, 932-937 (D.C. Cir. 1980). The possibility for aggrieved citizens to seek judicial review later is supported by the Administrative Procedure Act at 5 U.S.C. § 706(2)(A).

⁹⁵ 882 F.2d 1298.

⁹⁶ *Id.* at 1298-1299.

⁹⁷ 16 U.S.C. § 1540(2).

⁹⁸ 882 F.2d 1303-04.

⁹⁹ See Cass R. Sunstein, *What's Standing after Lujan—Of Citizen Suits, Injuries, and Article III*, 91 MICH. L. REV. 163, 226-31 (1992).

¹⁰⁰ *United States v. Students Challenging Regulatory Agency Procedures*, 412 U.S. 669 (1973). Standing based on a general interest (also known as the doctrine of "private attorneys general" in administrative law) in saving a natural resource for its own sake was first promoted at the Supreme Court by Justice William O. Douglas in a dissent to *Sierra Club v. Morton*, 405 U.S. 727, 744-45 (1972).

known as *Lujan I* and *Lujan II* were brought by activist groups against federal agencies that were believed to have violated environmental statutes. In *Lujan I* the high court ruled that an interested volunteer group did not have standing, per the Administrative Procedure Act,¹⁰¹ unless the group could claim direct injury from the alleged malfeasance.¹⁰² The Endangered Species Act was directly pertinent to *Lujan II*, in which an activist group accused the Department of the Interior of failing to consult with other agencies (which is required under the ESA¹⁰³) when authorizing developments on federally owned lands. The high court ruled that the group must show direct injury, and must also prove that the accused agency was responsible for actual environmental harms arising from the regulatory decision at issue.¹⁰⁴

The practical outcome of the *Lujan* cases was further entrenchment of the judicial focus on procedural minutiae rather than substantive environmental goals. Citizens were now required to prove direct harms *after* an agency's procedural noncompliance, at which time the environmental damage had been done, while agencies would not be required (even under judicial review) to provide evidence that they had properly observed all required procedures proactively.

The Supreme Court dealt another crucial blow to environmental statutes (including the Endangered Species Act, indirectly) by ruling in 1992 that a private landowner suffered an unconstitutional "regulatory taking" when he was required under a South Carolina state environmental law to alter the use of his land.¹⁰⁵ The landowner also claimed that the land use restrictions caused an uncompensated economic loss, and the high court found this argument persuasive as well.¹⁰⁶ As a result of this ruling, the broad non-economic public interest rationales of environmental laws were no longer sufficient, and a given environmental law had to prove that it did not damage anyone's economic interests.¹⁰⁷ This is particularly vexing for enforcement of the Endangered Species Act, which mandates protection of a vulnerable creature's habitat regardless of who owns the land in question. Thus, protection and rehabilitation actions can be stymied by economic arguments before they begin.¹⁰⁸

IV. Listing and delisting, and the transparency thereof

As described earlier, this article seeks to frame the Endangered Species Act as an informational statute that raises unique matters of informational availability and transparency, and

¹⁰¹ 5 U.S.C.A. § 702. Here the high court adopted a reverse interpretation of the language of the Administrative Procedure Act, which states, "A person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof." There is no direct indication in § 702 that someone outside of this definition does *not* have standing, but this was the court's interpretation.

¹⁰² *Lujan v. National Wildlife Federation*, 497 U.S. 871, 871-72 (1990) (involving the volunteer group's dispute with a reclassification by the Department of the Interior of public lands in the American West that would remove their natural protections and allow private industrial development).

¹⁰³ 16 U.S.C. § 1536(a)(4).

¹⁰⁴ *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 568-71 (1992).

¹⁰⁵ *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1031-32 (1992). Lucas had purchased oceanfront property in South Carolina with the plan to build houses for sale. Shortly after Lucas's purchase, the state passed the Beachfront Management Act which barred construction for purposes of preserving fragile beachfront ecosystems. That state law was found to have an insufficient description of the public interest it was trying to preserve.

¹⁰⁶ *Id.* at 1052-56.

¹⁰⁷ See Joseph L. Sax, *Property Rights and the Economy of Nature: Understanding Lucas v. South Carolina Coastal Council*, 45 STAN. L. REV. 1433, 1454-55 (1993).

¹⁰⁸ *Id.* at 1437-40.

the accountability of the government officials who manage that information.¹⁰⁹ The official endangered species list can be particularly useful for citizens who have either ethical concerns about the possibility of the earth's creatures disappearing forever, or specific objections to development projects managed by federal agencies.¹¹⁰ However, the presence of particular creatures on that list and how they got there, and the absence of other vulnerable creatures and why they are *not* on the list, are not the result of pure scientific consensus among wildlife biologists. Instead, the construction of the official list is often politicized by vested interests, during which transparency and accountability can be trumped by partisan chicanery.

Recall that once a creature is named as endangered or threatened in the ESA, all federal agencies must ensure that any actions by themselves or regulated parties must refrain from damaging that creature's habitat in order to prevent further loss of population.¹¹¹ Also recall that this focus on habitat protection has raised land use disputes that have severely damaged popular support of the ESA and federal environmental laws in general.¹¹² The greatest source of political and economic opposition to the ESA is its power to derail any development project to protect the smallest parcel of habitat for any vulnerable creature, with little room for debate over how to balance natural preservation with the costs of restricting development.¹¹³

The ongoing controversy has unleashed vested interests that meddle in the composition of the official endangered species list. Some may be nature lovers who want pristine ecosystems to be protected from development and use a local creature as justification; others may be economic interests that want to develop a land parcel and can do so if nobody knows that a vulnerable creature lives there. This has politicized the process under which species are listed as eligible for protection under the ESA.

How a creature becomes officially "endangered" or "threatened"

The majority of case law surrounding the Endangered Species Act concerns restrictions on development projects, but this article will examine a less prominent aspect of ESA case law: disputes over the placement of creatures on the official list and that list's accuracy. In turn, this analysis illustrates the importance of government-managed information and the processes of its creation. Such legal disputes reveal political machinations that damage the very meaning of how we learn that a creature is vulnerable and how to assess whether it receives effective protection from extinction.

The words *endangered* and *threatened* are established scientific terms used by wildlife biologists to assess the health of a creature's population and to determine if it is at risk of extinction.¹¹⁴ Regardless, the terms are used differently for the administration and enforcement of

¹⁰⁹ See *supra* notes 16-18 and accompanying text. Also recall that NEPA was partially inspired by the transparency protections of the Freedom of Information Act. See *supra* notes 12-13 and accompanying text.

¹¹⁰ See David S. Wilcove, Margaret McMillan, and Keith C. Winston, *What Exactly Is an Endangered Species? An Analysis of the U.S. Endangered Species List: 1985-1991*, 7 CONSERVATION BIOLOGY 87, 91-92 (1993).

¹¹¹ 16 U.S.C. §§ 1531(b)-1531(c).

¹¹² Regardless of the animosity from landowners and economic interests toward land use restrictions, the value of habitat preservation for saving plants and animals from extinction continues to be confirmed by science. Among wildlife biologists, there is little dispute about the need to preserve critical habitats. See generally REED F. NOSS, MICHAEL A. O'CONNELL, AND DENNIS D. MURPHY, *THE SCIENCE OF CONSERVATION PLANNING: HABITAT CONSERVATION UNDER THE ENDANGERED SPECIES ACT* (1997). However, in recent times some scientists have suggested that protecting the local habitat of a particular endangered species is less effective than focusing on the health of entire ecosystems, which in turn invigorates all the creatures that live there. See Goode, *supra* note 32.

¹¹³ See SALZMAN & THOMPSON, *supra* note 17, at 256.

¹¹⁴ At the international level, scientists have developed a much more precise system for categorizing the health of species populations. The International Union for Conservation of Nature (IUCN) has implemented the categories *Least Concern*,

the ESA, at which time they become matters of procedural compliance by government agencies and regulated parties. When listing a creature for protection, agency employees are mandated to observe the transparency requirements of the Freedom of Information Act¹¹⁵ and the procedural requirements of the Administrative Procedure Act.¹¹⁶ However, these officials do not work in a political vacuum. Vociferous opposition from both environmentalists and supporters of property rights has turned the listing of species into a contentious and politicized process that may have damaged the informational integrity of the ESA.

Via agency petition and response processes mandated by the Administrative Procedure Act,¹¹⁷ any citizen can request that the U.S. Fish & Wildlife Service initiate an investigation into a possibly vulnerable species, and the FWS is required to determine the merit of such an investigation and issue a response.¹¹⁸ The FWS then has one year to perform scientific studies on that creature's population levels and habitat, and is required to officially list the species for protection if investigators find that "natural or manmade factors threaten the species with extinction."¹¹⁹ There is no requirement for the FWS to consider political or economic factors when making this determination.¹²⁰ While courts rarely disagree with the findings of expert scientists,¹²¹ they do frequently find procedural errors in the resulting additions to or subtractions from the official endangered species list, which can then be overturned per administrative law procedure.

Judicial adventures in listing and delisting

The only time a dispute over the protection of a vulnerable species reached the Supreme Court was the *Tennessee Valley Authority* case, but the creature in question (the snail darter) was already listed as endangered by the FWS via proper regulatory procedures mandated by the Endangered Species Act.¹²² While the precise matter of the appearance of creatures on the official endangered species list has not been argued at the Supreme Court, there have been numerous rulings on this matter in the lower federal courts, and noteworthy examples will be analyzed here.

Tellingly, there were no such cases specifically about listing or delisting a creature until 1989, which (as described in the previous section) was around the time that the judiciary began to pull back the substantive public interest goals of the Endangered Species Act and shift toward procedural

Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild, and Extinct. Unlike the Endangered Species Act, the IUCN system acknowledges missing information with the additional category *Data Deficient*. As of early 2021, IUCN states that more than 35,000 animals are threatened with extinction; this constitutes 28% of the species whose population figures are known; while there are surely more vulnerable species for whom data is deficient. See International Union for Conservation of Nature, *The IUCN Red List of Threatened Species*, <https://www.iucnredlist.org/>.

¹¹⁵ 5 U.S.C. §§ 552(a)(1)(B)-552 (a)(1)(D).

¹¹⁶ 5 U.S.C. § 500(a).

¹¹⁷ 5 U.S.C. § 553.

¹¹⁸ 16 U.S.C. § 1533(b)(3)(A).

¹¹⁹ 16 U.S.C. § 1533(b)(1)(A).

¹²⁰ Note that the ESA includes a requirement for the FWS to consider impacts on economic and national security upon listing a species, but this pertains to the effects of losing the species in question or its habitat, not the concerns of landowners or developers. 16 U.S.C. § 1533(b)(2).

¹²¹ See SALZMAN AND THOMPSON, *supra* note 17, at 259-260. Per the "Judicial Deference" doctrine in administrative law, during judicial review a judge will refrain from second-guessing agency regulatory decisions that were made with subject-matter expertise that is beyond the judge's personal knowledge. The assumption is that the statute in question was written by Congress to give authority to experts at the enforcement agency. Procedures for courts to follow when reviewing an agency decision, and determining how much deference to give to the agency's subject matter expertise, were laid out by the Supreme Court in *Chevron USA, Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984).

¹²² See *supra* notes 74-75 and accompanying text.

minutiae and private property rights. Some such cases were brought by economic interests who opposed a recent listing, and others were brought by environmentalists who opposed a recent *delisting* or demanded a new listing. This shows that anyone can find reasons to accuse the FWS of violating the Endangered Species Act, and almost all such cases were battles over the procedural minutiae of how a vulnerable creature was added to or removed from the official list, with few substantive discussions of whether said creature may soon disappear forever.

The first noteworthy dispute over a creature's listing for protection under the ESA, when opposed by economic interests, reached the Circuit Court level in 1989. Desert tortoises in the Las Vegas area were perishing rapidly from a poorly understood contagious disease, leading to an emergency ESA listing that blocked planned housing developments. The city, which was in favor of new construction, challenged the FWS decision in court as "irrational" because the severity of the disease was still under scientific investigation, so perhaps the tortoises were not facing an emergency at all. The District of Columbia Circuit ruled that the city had the burden of proof on the accusation of an irrational decision; the plaintiffs failed to deliver the necessary evidence and the FWS listing decision for the desert tortoise was allowed to stand.¹²³ At the time of writing, the most recent case brought by opponents of an ESA listing was in 2020, when Texas demanded that a small bird called the golden-cheeked warbler be removed from the official endangered species list because the FWS had never sufficiently studied the bird's critical habitat. The Fifth Circuit determined that the original listing of the bird back in 1990 was appropriate, but also ordered the FWS to conduct new studies to determine if the population had climbed to viable levels in 2020, as claimed by Texas.¹²⁴

The continuing desire of some economic and political interests to have a creature delisted, which would reduce or eliminate the protection of its habitat so new developments can proceed, are exemplified by the lengthy saga of the Alabama sturgeon. This rather large and long-lived fish is only known to inhabit the lower reaches of the Alabama River near the city of Mobile, and was first proposed for federal habitat protection in 1994.¹²⁵ Even the proposal was challenged by a local development consortium because the Department of the Interior had sought advice from a committee of experts that had not held open meetings. The Eleventh Circuit ruled that this was a violation of the Federal Advisory Committee Act, which requires open and transparent meetings of such committees,¹²⁶ and thus any listing of the Alabama sturgeon for endangered species protection was invalidated.¹²⁷ This was a purely procedural decision that disregarded whether or not the fish really was in danger of extinction.¹²⁸

After following procedures to the best of its abilities, and with no apparent secrecy, the FWS formally listed the Alabama sturgeon as endangered in 2000. The same consortium sued again, claiming financial harm due to the prohibition of future development opportunities. The Eleventh Circuit found that the consortium had standing to sue for economic damages, and remanded the matter to district court.¹²⁹ That lower court dispute reached the Eleventh Circuit yet again a few years later, by which time the FWS had conducted a study of the fish's critical habitat. This time the local economic consortium claimed that the study was incomplete because it did not acknowledge an

¹²³ *City of Las Vegas v. Lujan*, 891 F.2d 927, 934 (D.C. Cir. 1989).

¹²⁴ *General Land Office of Texas v. Dep't of the Interior*, 947 F.3d 309, 320-21 (5th Cir. 2020).

¹²⁵ The Alabama sturgeon (*Scaphirhynchus suttkusi*) was first formally identified by biologists in 1991, and its population was soon determined to be dangerously low. See U.S. Fish & Wildlife Service, *Listing of the Alabama Sturgeon*, https://www.fws.gov/daphne/fact_sheets/alsturg.pdf.

¹²⁶ 5 U.S.C. app. § 10 (1972).

¹²⁷ *Alabama-Tombigbee Rivers Coalition v. Dep't of Interior*, 26 F.3d 1103, 1005 (11th Cir. 1994).

¹²⁸ See generally Ray Vaughan, *State of Extinction: The Case of the Alabama Sturgeon and Ways Opponents of the Endangered Species Act Thwart Protection for Rare Species*, 46 ALA. L. REV. 569 (1995).

¹²⁹ *Alabama-Tombigbee Rivers Coalition v. Norton*, 338 F.3d 1244, 1252-54 (11th Cir. 2003).

independent research report that favored the consortium's position against habitat protection, but the Circuit Court rejected this claim and ruled that the Alabama sturgeon had been listed for protection appropriately.¹³⁰ This legal saga took 13 years and all rulings were based on minor statutory paperwork requirements demanded by economic interests; research for this article located no substantive discussion in court of the fish's actual survival prospects during that period.

Lawsuits brought by environmentalists, in favor of a new listing or opposed to a delisting, are also common in the judicial record. A listing for the Queen Charlotte goshawk was desired by environmentalists but denied by the FWS in 1994; the bird's supporters sued but were unable to prove that the FWS had made any scientific errors when reaching its decision that the bird was *not* threatened or endangered.¹³¹ Another noteworthy case of this nature was brought in 1998, after an environmental group petitioned for the listing of the Columbian sharp-tailed grouse for protection under the ESA, and complained that the FWS had not responded to the petition within the required 90-day period.¹³² The Tenth Circuit ruled that the FWS had been hobbled by a recent budget cut and a backlog of scientific work, so the environmentalists' claim was unreasonable.¹³³ The Columbian sharp-tailed grouse is known to face population pressures but never was listed for protection by the FWS.¹³⁴

The *delisting* of a previously protected species can also draw the ire of environmentalists, even though this development should indicate that the Endangered Species works by restoring a vulnerable creature's population to viable levels. This was the basis of a dispute brought by environmentalists over the delisting of the flying squirrel, with the D.C. Circuit holding that the FWS had made no scientific errors when it decided that the animal had recovered from the brink of extinction.¹³⁵

On some occasions, the protection status of particularly charismatic animals will inspire legal challenges from all sides. This has been the case for two very controversial creatures that will be discussed in the next section of this article. For now, the saga of the American government's efforts to preserve the polar bear is illustrative. This superstar animal lives in several countries and is vulnerable everywhere;¹³⁶ its remaining population in Alaska may be eligible for protection under America's Endangered Species Act. In 2005, the FWS listed Alaska polar bears as *threatened* due to the effects of climate change. This brought legal challenges from environmentalists who wanted the polar bear to be listed as *endangered* (not just threatened) so it would qualify for stronger federal habitat protection; while opponents, largely affiliated with fossil fuel interests, accused the FWS of violating ESA requirements for scientific evidence on the supposed threats to its habitat. Several suits from all directions were combined by the D.C. Circuit, which ruled in 2013 that the FWS had made no scientific errors and had also consulted properly with local biological experts in Alaska, so the *threatened* listing for that state's resident population of polar bears was allowed to stand.¹³⁷ This

¹³⁰ Alabama-Tombigbee Rivers Coalition v. Kempthorne, 477 F.3d 1250, 1260-62 (11th Cir. 2007).

¹³¹ Southwest Center for Biological Diversity v. Babbitt, 215 F.3d 58, 61 (D.C. Cir. 2000).

¹³² Per the Endangered Species Act, this decision must be made within 90 days "to the maximum extent practicable." 16 U.S.C. § 1533(b)(3)(A).

¹³³ Biodiversity Legal Found. v. Babbitt, 146 F.3d 1249, 1251-52 (10th Cir. 1998).

¹³⁴ See Richard W. Hoffman and Allan E. Thomas, *Columbian Sharp-tailed Grouse (Tymppanuchus phasianellus columbianus): A Technical Conservation Assessment*, United States Forest Service (Aug. 17, 2007), <https://digitallibrary.utah.gov/awweb/awarchive?type=file&item=66400>, at 87-90.

¹³⁵ Friends of Blackwater v. Salazar, 691 F.3d 428, 450-51 (D.C. Cir. 2012).

¹³⁶ The IUCN has dedicated significant resources and has inaugurated several groups of specialists to push for international action on polar bears and their declining population. For an introduction, see International Union for Conservation of Nature, IUCN/SSC Polar Bear Specialist Group, <https://pbsg.npolar.no/>.

¹³⁷ In re Polar Bear Endangered Species Act List and Sec. 4(d) Rule Litig., 709 F.3d 1, 19 (D.C. Cir. 2013).

was good news for the charismatic polar bear and its supporters, but other controversial animals have not fared so well, depending on who does or does not want them on the endangered species list.

V. The introverts and extroverts of endangered species listings

Environmentalists are often accused of striving to save glamorous animals like polar bears from extinction while ignoring the not-so-glamorous.¹³⁸ This may be a valid critique, but the obsession over controversial animals from all sides of the political spectrum has fueled court battles that have possibly damaged the ability of the Endangered Species Act to protect their humbler brethren.

While the selection of court rulings in the previous section covered many creatures great and small, two animals in particular have brought the Endangered Species Act to court again and again. This reflects political disputes over human developments in critical animal habitats, or enmity toward creatures that interact with humans in contentious ways. In both cases, politicians became involved, as did volunteer legal foundations and moneyed interests. The two most infamous animals in the American judicial record are the northern spotted owl—a reclusive bird that simply wishes to live in large old trees, and the gray wolf—an apex predator that cares little for human boundaries or economic concerns.

Up to your neck in northern spotted owls

“This guy is so far out in the environmental extreme we’ll be up to our necks in owls and out of work for every American.” —Campaign speech by President George H.W. Bush, referring to future President Bill Clinton, 1992.¹³⁹

In the 1980s and 1990s, the northern spotted owl¹⁴⁰ instigated a nationwide debate over the conflict between economic development and species preservation, with particularly nasty political rhetoric exchanged between conservative proponents of property rights and progressive proponents of environmental protection. This controversy was the catalyst for a nationwide debate over the Endangered Species Act,¹⁴¹ and the northern spotted owl continues to feature in environmental debates to the present day.¹⁴²

In the late 1980s, timber companies had targeted the old-growth forests of Oregon and Washington for extensive logging, arousing the ire of environmentalists, because those forests contained old-growth trees that had been hollowed out over time by the elements. Such trees are

¹³⁸ See e.g. Eoghan Macguire, *Beauty Trumps Beast in Conservation Efforts*, CNN (May 8, 2012), <https://www.cnn.com/2012/05/06/world/beautiful-ugly-animals>.

¹³⁹ George Herbert Walker Bush, campaign speech in Warren, MI (Oct. 29, 1992), <https://www.c-span.org/video/?33818-1/bush-campaign-speech>. The comment about spotted owls begins at 21:35 in the video.

¹⁴⁰ The northern spotted owl (*Strix occidentalis caurina*), a subspecies of the spotted owl, stands at 16-19 inches and nests inside hollow old-growth trees, with a range extending from southwestern Canada to southern Oregon. As of 2021, spotted owls in general are listed as *near threatened* by IUCN, with a population that is trending downward. See International Union for Conservation of Nature, *Spotted Owl: Strix occidentalis*, <https://www.iucnredlist.org/species/22689089/180937862>.

¹⁴¹ See Mark Bennett & Kurt Zimmerman, *Politics and Preservation: The Endangered Species Act and the Northern Spotted Owl*, 18 *ECOLOGY L.Q.* 105, 124-29 (1991).

¹⁴² See e.g. Brad Knickerbocker, *Northern Spotted Owl’s Decline Revives Old Concerns*, CHRISTIAN SCIENCE MONITOR, (June 27, 2007), <http://www.csmonitor.com/2007/0627/p02s01-sten.html>; Andy McGlashen, *Trump Administration Drastically Slashes Protections for Northern Spotted Owls*, AUDUBON (Jan 15, 2021), <https://www.audubon.org/news/trump-administration-dramatically-slashes-protections-northern-spotted-owls>.

preferred nesting sites for the northern spotted owl, which at the time was a *potentially* threatened species. The environmental community struck upon a plan to get the northern spotted owl on the official endangered species list, which in turn would activate the power of the Endangered Species Act to shut down logging operations that could destroy the bird's critical habitat. This could potentially outlaw commercial logging across vast portions of the Pacific Northwest.¹⁴³

A large coalition of environmental activists petitioned the FWS to add the northern spotted owl to the official list. After a lengthy scientific investigation, the FWS declined to list the bird, concluding that its regional population was not dangerously low.¹⁴⁴ The environmental coalition then sued the FWS under the Endangered Species Act, claiming procedural violations in the agency's decision against listing the bird for habitat protection.¹⁴⁵

In the *Northern Spotted Owl* case of 1988, the federal court for the Western District of Washington ruled that the FWS had not conducted a sufficiently detailed scientific investigation into the bird's population levels and habitat needs, and ordered the agency to try again.¹⁴⁶ After another scientific investigation lasting about two years, the FWS changed its mind and listed the northern spotted owl as *threatened* and worthy of limited habitat protection, to be enforced by the U.S. Forest Service.¹⁴⁷ While this was a victory for the bird's supporters, the environmental coalition issued another legal challenge,¹⁴⁸ claiming that the Forest Service was unprepared to manage the habitat in the face of expected pressure from commercial logging operations. Per various provisions of the National Forest Management Act,¹⁴⁹ the Endangered Species Act, and the National Environmental Policy Act, Judge William Dwyer of the Western District of Washington shut down logging operations across much of Washington and Oregon in 1992,¹⁵⁰ igniting a political firestorm.¹⁵¹

The logging industry claimed that tens of thousands of jobs would be lost, loggers disparaged the northern spotted owl as a job killer, and environmentalists and economic interests battled it out in the media.¹⁵² Bowing to the intense public controversy, the George H.W. Bush administration summoned the God Squad and instructed it to review the original listing of the northern spotted owl as threatened under the Endangered Species Act.¹⁵³ To the surprise of the political class, the God Squad agreed with the bird's listing and with Judge Dwyer's injunction, and announced that it

¹⁴³ See Steven L. Yaffee, *Lessons about Leadership from the History of the Spotted Owl Controversy*, 35 NATURAL RESOURCES J. 381, 399-401 (1995).

¹⁴⁴ See Victor M. Sher, *Travels with Strix: The Spotted Owl's Journey through the Federal Courts*, 14 PUB. LAND L. REV. 41, 46-47 (1993).

¹⁴⁵ *Northern Spotted Owl v. Hodel*, 716 F. Supp. 479 (W.D. Wash. 1988). The bird was listed as the primary plaintiff on its own behalf, supported by a wide variety of volunteer groups as secondary plaintiffs. *Id.* at 480.

¹⁴⁶ 716 F. Supp. 481-483. The initial FWS decision was ruled to be arbitrary and capricious under the Administrative Procedure Act, 5 U.S.C. § 706(2)(A). The *Hodel* ruling was mostly based on investigations of the bird's population levels. In a related ruling three years later, the FWS was ordered to re-investigate the bird's critical habitat needs as well. *Northern Spotted Owl v. Lujan*, 758 F.Supp. 621 (W.D. Wash. 1991).

¹⁴⁷ *Spotted Owl: Judge Issues Permanent Injunction Barring Timber Sales*, KITSAP SUN (Jul. 3, 1992), https://products.kitsapsun.com/archive/1992/07-03/245168_spotted_owl_judge_issues_perman.html.

¹⁴⁸ *Seattle Audubon Society v. Moseley*, 798 F.Supp. 1484 (W.D. Wash. 1992).

¹⁴⁹ National Forest Management Act of 1976, 16 U.S.C. § 1600 (1988).

¹⁵⁰ 798 F.Supp. 1492-94.

¹⁵¹ Sher, *supra* note 144, at 71-75.

¹⁵² Jeanne Brokaw, *Does Anybody Give a Hoot?*, MOTHER JONES (Nov./Dec. 1996), <https://www.motherjones.com/politics/1996/11/does-anybody-give-hoot/>. See also William R. Freudenburg, Lisa J. Wilson, and Daniel J. O'Leary, *Forty Years of Spotted Owls? A Longitudinal Analysis of Job Losses*, 41 SOCIOLOGICAL PERSPECTIVES 1 (1998). The number of potential lost jobs attributable to the court injunction was overestimated, and the industry had been steadily losing jobs during that period due to a variety of factors ranging from environmental regulations and weak prices to industrial automation and international competition.

¹⁵³ Officially known as the Endangered Species Committee; for information on this committee's composition and responsibilities, see *supra* notes 80-83 and accompanying text.

avored limitations (though not a complete ban) on logging in the region. Both the logging industry and environmentalists were dissatisfied by the decision.¹⁵⁴

The God Squad's decision itself inspired yet another court dispute, this time at the circuit court level. In the *Portland Audubon* case the following year, the Ninth Circuit addressed heretofore unresolved matters of the God Squad's opaque procedures and the under-enforced public participation requirements of the ESA.¹⁵⁵ A local chapter of the Audubon Society, which favored *endangered* rather than merely *threatened* status for the northern spotted owl, disputed the God Squad's mysterious decision, and raised a specific dispute concerning suspected *ex parte* discussions between the committee and the White House, which was heavily invested in the controversy and had aligned itself with the logging industry.¹⁵⁶ The plaintiffs found such obfuscation to violate the spirit of the ESA, which requires the God Squad's meetings and the records thereof to be open to citizens.¹⁵⁷

The Ninth Circuit agreed that the undisclosed *ex parte* contacts violated both the ESA and the Administrative Procedure Act, and noted with finality that such things were "prohibited by law."¹⁵⁸ However, this was a pyrrhic victory for the bird lovers, because as is usual in administrative law, the remedy for the God Squad's violation was framed as a matter of procedural compliance. The committee was ordered to add the previously secret records of conversations with the White House to the public record, and to hold another public hearing without forgetting to invite the public.¹⁵⁹ After this was done, the God Squad had fulfilled its procedural requirements, and reached the same decision as it did the first time. As a result, plans were laid to manage—but not ban—regional logging, in the interests of limited—but not comprehensive—habitat protection for the northern spotted owl. Judge Dwyer's 1992 injunction against all logging in the region was then dropped as moot.¹⁶⁰

The ultimate outcome of this controversy was ironic. A minor victory for transparency in the listing of the northern spotted owl as worthy of protection eventually resulted in relatively weak protection for the bird. To the present day biologists consider this bird's survival to be one of the most important matters of conservation in the northwestern United States, and its population continues to hover at dangerously low levels.¹⁶¹ The conflict between habitat protection and commercial interests continues to affect the northern spotted owl as well; one week before leaving office in January 2021, President Donald Trump declared that large territorial habitat zones for the bird were no longer necessary, and ordered the FWS to remove more than three million acres from those territories. This was characterized as a "common sense revision" to a previous regulatory

¹⁵⁴ See Brad Knickerbocker, *Split Decision on Spotted Owl is Inconclusive*, CHRISTIAN SCIENCE MONITOR (May 18, 1992), <https://www.csmonitor.com/1992/0518/18081.html>.

¹⁵⁵ *Portland Audubon Society v. Endangered Species Committee*, 984 F.2d 1534 (9th Cir. 1993).

¹⁵⁶ The plaintiffs had obtained a declaration from a government employee who claimed that the God Squad faced political pressure from the George H.W. Bush administration to arbitrarily exempt the northern spotted owl from the Endangered Species Act, which would allow lucrative logging and development projects in the region to proceed. 984 F.2d 1550-1551.

¹⁵⁷ 16 U.S.C. § 1536(e).

¹⁵⁸ 984 F.2d 1538-41.

¹⁵⁹ *Id.* at 1548-1549.

¹⁶⁰ John H. Cushman, *Judge Drops Logging Ban in Northwest*, N.Y. TIMES (June 7, 1994), <https://www.nytimes.com/1994/06/07/us/judge-drops-logging-ban-in-northwest.html>.

¹⁶¹ Randy Trick, *Saving the Spotted Owl*, 69 NW LAWYER 47, 48 (Sept. 2015). A rising regional population of more aggressive barred owls, which compete with more laidback northern spotted owls for the same habitats and food sources, became a problem in the 2010s.

decision, though evidence indicates that the logging industry still covets those lands.¹⁶² Once again, the Endangered Species Act was unable to fully protect the habitat of a creature that is on its own official list.

In the company of wolves

“Nobody has the right to endanger my life or my children’s lives by introducing predators that kill for a living.” —anonymous¹⁶³

Wolves were once common throughout the northern hemisphere; in North America they reached from arctic Canada to central Mexico and were known to inhabit all of the continental United States.¹⁶⁴ During the industrial era their range in North America retreated mostly to Canada and Alaska; in the continental U.S. a few scattered populations hung on in remote wilderness areas.¹⁶⁵ Wolves and humans have a long shared history, and people either revere wolves as embodiments of the power of nature or fear them as ruthless killers. Contrary to popular opinion, wolves rarely attack humans but they have earned human enmity by feasting on livestock. In the belief that they might attack humans and the fact that they really do attack livestock, wolves have been hunted for most of American history, but due to their glamour as an American icon there have been many attempts to reestablish their population.¹⁶⁶

As an iconic species, the wolf has been a lightning rod for controversy that in turn has fueled decades of regulatory actions and court battles; as noted by the District Court for the District of Columbia, “Wolves are the subject of heated disputes, with those on every side of the issue offering heartfelt arguments as to how best to manage this unique species. The last decade of litigation is a testament to those passions.”¹⁶⁷ The *last decade* in that quote refers to a single decision by the FWS in 2003 to upgrade the gray wolf from endangered to merely threatened, which launched several federal lawsuits brought by both opponents and proponents of protecting the animal and its habitat.¹⁶⁸

Popular opinion for and against restoring wolves to their ancestral range has generated controversy for much of modern American history, and the wolf was one of the first animals listed for protection as soon as the Endangered Species Act was passed in 1973.¹⁶⁹ The wolf has been entangled in court disputes about FWS authority and the science of animal populations ever since,

¹⁶² Lisa Friedman and Catrin Einhorn, *Trump Opens Habitat of a Threatened Owl to Timber Harvesting*, N.Y. TIMES (Jan. 13, 2021), <https://www.nytimes.com/2021/01/13/climate/trump-spotted-owl.html>.

¹⁶³ From a citizen’s comment collected for the Environmental Impact Statement compiled for a 1994 plan to reintroduce wolves in the northwestern United States. See U.S. Fish & Wildlife Service, *The Reintroduction of Gray Wolves to Yellowstone National Park and Central Idaho; Final Environmental Impact Statement* (May 1994), <https://digitallibrary.utah.gov/awweb/awarchive?type=file&item=60003>, at 54.

¹⁶⁴ The animal is known more specifically as the gray wolf (*Canis lupus*), which in turn is made up of more than thirty subspecies that followed their own evolutionary paths after small populations became separated. Notable examples in the United States include the eastern wolf (*Canis lupus lycaon*, also known as the timber wolf) in the western Great Lakes region, and the very rare red wolf (*Canis lupus rufus*) of the southeastern United States. See International Wolf Center, *Types of Wolves*, <https://wolf.org/wolf-info/basic-wolf-info/types-of-wolves/>.

¹⁶⁵ See generally José María Fernández-García and Nerea Ruiz de Azua, *Historical Dynamics of a Declining Wolf Population: Persecution vs. Prey Reduction*, 56 EUROPEAN J. WILDLIFE RESEARCH 169 (2009).

¹⁶⁶ Williams, *supra* note 30, at 132.

¹⁶⁷ *Humane Society of the United States v. Jewell*, 76 F.Supp.3d 69, 137 (D.D.C. 2014).

¹⁶⁸ *Id.* at 106-129. This and other cases inspired by the 2003 FWS decision will be analyzed at *infra* notes 177-180 and accompanying text.

¹⁶⁹ Edward Roggenkamp, *Gray Wolf Removed from Endangered Species List & Environmental Groups File Notice of Intent to Sue*, Endangered Species Law & Policy, Nossaman LLP (Nov. 20, 2020), <https://www.endangeredspecieslawandpolicy.com/trump-administration-removes-gray-wolf-from-endangered>.

indicating its iconic status but also showing that litigation over the Endangered Species Act reflects regional and personal politics involving hunting revenues and unfounded fears about human safety, rather than its utility for saving vulnerable creatures from extinction.¹⁷⁰

The record indicates that the FWS has been pressured to upgrade, downgrade, delist, or relist the wolf under the Endangered Species Act repeatedly, and the associated court hearings rarely discuss the wolf's long-term prospects for survival in any substantive way. Whenever the animal's protection under ESA is reduced, environmentalists challenge the regulatory decision with pleas to observe the spirit of ESA combined with settled science on the value of wolves to their ecosystems.¹⁷¹ Whenever the animal's protection is enhanced under ESA, opponents challenge the regulatory decision with verifiable economic arguments on potential losses of livestock and unsupported horror stories of attacks on humans.¹⁷² Both of those arguments have merits, but per the points being made in this article, the ongoing legal battle has reduced the utility of the Endangered Species Act's official list of vulnerable creatures, and whether that list truly reflects the state of nature and the threats to animals that are at risk of disappearing.

After the wolf nearly disappeared from all of the continental United States due to habitat loss and over-hunting, reintroduction programs began in 1995. Starting at Yellowstone National Park and nearby areas of Wyoming, Montana, and Idaho, fourteen wolves were imported from Canada and set loose in their new (but ancestral) homes. Wolves had not been seen in the area for about 70 years, but the initial imported individuals survived and reproduced, establishing a viable local population.¹⁷³ It did not take long for these wolves, and by extension the Endangered Species Act, to be hauled into court to resolve political and unscientific disputes over whether the animal should have been listed as endangered. The first such federal suit was brought by a Montana hunter who faced a criminal charge under ESA for bagging a wolf just barely after the imported specimens had been let loose. The hunter argued that the imported wolves were not worthy of protection because they were an "experimental population" that had not been considered separately from remnant native populations as required under ESA.¹⁷⁴ The Ninth Circuit found this to be an unpersuasive argument for overturning the hunter's criminal conviction.¹⁷⁵

¹⁷⁰ Jamison E. Colburn, *Canis (Wolf) and Ursus (Grizzly): Taking the Measure of an Eroding Statute*, 22 NAT. RESOURCES & ENV'T 22, 22 (2007).

¹⁷¹ As an "apex predator" at the top of the food chain, a wolf has a large influence on the ecosystem in which it lives. For example, if wolves disappear, the smaller herbivorous animals that they hunt can explode in population, which in turn reduces the growth of plants that those prey animals eat, which causes new plant species to move in, which can then alter the availability of food for birds, and so on. See e.g. National Science Foundation, *Loss of Large Predators Caused Widespread Disruption of Ecosystems*, press release (July 14, 2011), https://www.nsf.gov/news/news_summ.jsp?cntn_id=121020. Reintroducing wolves and other apex predators to such altered ecosystems can restore them to their previous pristine state, but the process can take many years, especially if those ecosystems have been further damaged by human developments. These effects have been scientifically confirmed at Yellowstone National Park. See Katherine Lackey, *Yellowstone's Wolves are Back, but They Haven't Restored the Park's Ecosystem. Here's Why*, USA TODAY (Sept. 7, 2018), <https://www.usatoday.com/story/tech/science/2018/09/07/wolves-reintroduction-yellowstone-ecosystem/973658002/>.

¹⁷² See e.g. Spencer McKee, *The Key Arguments for Both Sides of the Wolf Reintroduction Debate in Colorado*, OUTTHERE COLORADO (Aug. 23, 2019), https://www.outtherecolorado.com/features/the-key-arguments-for-both-sides-of-the-wolf-reintroduction-debate-in-colorado/article_be29ef6e-753a-5f7b-bef7-fd51a7bb33f5.html; Alesandra Tejada, *What You Need to Know About a Ballot Effort to Bring Wolves Back to Colorado*, THE COLORADO INDEPENDENT (Jan. 6, 2020), <https://www.coloradoindependent.com/2020/01/06/colorado-reintroduction-gray-wolf-ballot-measure-explainer/>.

¹⁷³ William J. Ripple and Robert L. Beschta, *Trophic Cascades in Yellowstone: The First 15 Years after Wolf Reintroduction*, 145 BIOLOGICAL CONSERVATION 205, 206-08 (2012).

¹⁷⁴ 16 U.S.C. § 1533(j)(3).

¹⁷⁵ *United States v. McKittrick*, 142 F.3d 1170, 1178 (9th Cir. 1998).

Due to their local success in and around Yellowstone, the FWS upgraded the wolf from *endangered* to merely *threatened* in 2003, which resulted in less intensive habitat restoration plans and reduced controls on hunting.¹⁷⁶ This inspired multiple federal lawsuits brought by environmentalists accusing the FWS of violating the scientific requirements of the Endangered Species Act. The FWS decision was enjoined by federal judges in Oregon¹⁷⁷ and Vermont¹⁷⁸ (each of which hosted environmental groups hoping to protect local remnant populations of wolves hanging on from ancestral times), due to violations of two different ESA requirements.

The 2003 upgrading decision continued to haunt the FWS eleven years later, when another federal judge ruled that the decision did not properly consider another subpopulation of wolves thousands of miles away in the western Great Lakes region.¹⁷⁹ That ruling was upheld on appeal in 2017, when the D.C. Circuit added that the FWS did not use the best available science when determining that wolf subpopulations in the Rocky Mountain, Great Lakes, and southwestern regions of America were not distinct enough to qualify for separate protection decisions (as opposed to a nationwide decision).¹⁸⁰

Wyoming, Montana, and Idaho were instructed to implement their own wolf protection plans after the 2003 FWS delisting decision,¹⁸¹ with Wyoming deciding to manage the reintroduced wolves as predators that could be controlled via hunting. This put most of the new population at risk, so the FWS rejected Wyoming's plan under the requirements of the Endangered Species Act, after which the state's leaders sued. The case was dismissed because the state made an unconvincing case about the lack of an Environmental Impact Statement.¹⁸²

Regardless, the political firestorm had begun, and the FWS was compelled to study wolf subpopulations at the local level and issued several listing or delisting decisions for wolves in several specific geographic areas.¹⁸³ This resulted in yet another lawsuit, this time brought by wildlife activists, in which the court ruled that the decisions on regional subpopulations were not authorized under ESA rules that required species-wide decisions.¹⁸⁴

Meanwhile, Wyoming's wolf management plan from 2004 was still being litigated as late as 2017. After determining that the state's plan was in fact beneficial for the survival of the wolves (a reversal of its previous decision on the matter), the FWS again delisted the Wyoming subpopulation from ESA protection in 2011. Environmentalists challenged the FWS in court again with a claim of violating the ESA; the District Court for the D.C. Circuit ruled that the delisting was reasonable under some provisions of the ESA (regarding the agency's consultations with states) but unreasonable under others (regarding scientific determinations of population viability), and

¹⁷⁶ The text of the 2003 FWS decision is compiled at 76 Fed. Reg. 8166 (Dec. 28, 2011).

¹⁷⁷ *Defenders of Wildlife v. Secretary, Dep't of the Interior*, 354 F.Supp.2d 1156, 1172-73 (D. Or. 2005). In this ruling the FWS was found to have violated the ESA at 16 U.S.C.A. § 1533(a)(1), which requires listing or delisting decisions to be supported by the "best scientific and commercial data available."

¹⁷⁸ *National Wildlife Federation v. Norton*, 386 F.Supp.2d 553, 585 (D. Vt. 2005). In this ruling the FWS was found to have violated the ESA at 16 U.S.C.A. § 1532(6), which mandates that a species be listed as threatened or endangered if that is the situation in any of its native ranges.

¹⁷⁹ *United States v. Jewell*, 76 F.Supp.3d 69, 110-111 (D.D.C. 2014).

¹⁸⁰ *Humane Society of United States v. Zinke*, 865 F.3d 585, 605-06 (D.C. Cir. 2017).

¹⁸¹ 72 Fed. Reg. 6106 (Feb. 8, 2007).

¹⁸² *Wyoming v. Dep't of the Interior*, 360 F. Supp. 2d 1214, 1238 (D. Wyo. 2005). Wyoming claimed that the FWS did not prepare an adequate Environmental Impact Statement (EIS) when deciding to reject the state's wolf protection plan. An EIS is required under the National Environmental Policy Act at 42 USC § 4332(C). The court ruled that an EIS is only required for a "major federal action" related to construction and development, and the FWS regulatory decision was not such an action.

¹⁸³ See Williams, *supra* note 30, at 138-139.

¹⁸⁴ *Defenders of Wildlife v. Salazar*, 729 F. Supp. 2d 1207, 1215-16 (D. Mont. 2010). The relevant provision of ESA is at 16 U.S.C. § 1533(a)(1).

remanded the matter to the FWS for further study.¹⁸⁵ However, the District Court also ruled that Wyoming had succumbed to political arguments that damaged its claims to be able to protect the wolf from local extinction in its territory.¹⁸⁶ Several years later, the FWS decision to delist the Wyoming subpopulation was upheld by the D.C. Circuit as based on the best available scientific evidence as required by ESA.¹⁸⁷ That 2017 ruling wrapped up a procedural dispute that had been lurching along for 14 years; and a review of the various court documents reveals very little substantive discussion of whether the wolves were truly recovering from the brink of extinction during that period.

Outside of Wyoming's legal saga, political pressure from Montana and Idaho, which favored hunting wolves as a population control mechanism, led Congress in 2011 to arbitrarily delist the wolf from ESA protection in those states.¹⁸⁸ This legislative action had little to do with the science of viable wolf populations. The congressional move was challenged in court by environmentalists but upheld as an acceptable exercise of legislative power by the Ninth Circuit in 2017.¹⁸⁹ That same year the D.C. Circuit ruled that the FWS was not authorized to delist a different subpopulation of wolves in the western Great Lakes region.¹⁹⁰

Not only did this result in an inconclusive split precedent at the circuit court level; both of these decisions were made via judicial inspections of procedural minutiae rather than the spirit of protecting an iconic animal from extinction, and they still managed to reach different outcomes.¹⁹¹ Politics polluted all of the decisions by the FWS and the rulings in several different layers of the federal court system that upheld those decisions or struck them down. Since wolves were reintroduced in the Rocky Mountain region in 1995, the regional subpopulation has been subjected to at least eleven FWS decisions (and one by Congress¹⁹²) in which those wolves have been listed or delisted or downgraded or upgraded for protection under the Endangered Species Act.¹⁹³ Other subpopulations, particularly that in the western Great Lakes region, have also been subjected to shifting levels of protection.¹⁹⁴

According to the FWS, the western Great Lakes subpopulation has slowly returned to viable numbers.¹⁹⁵ As for the subpopulation in the Rocky Mountain region, environmentalists had conceded a comeback toward viable numbers by the 2010s,¹⁹⁶ and FWS studies confirmed the same.¹⁹⁷ While

¹⁸⁵ *Defenders of Wildlife v. Jewell*, 68 F. Supp. 3d 193, 207-11 (D.D.C. 2014).

¹⁸⁶ *Id.* at 203.

¹⁸⁷ *Defenders of Wildlife v. Zinke*, 849 F.3d 1077, 1088-89 (D.C. Cir. 2017). Again, the relevant provision of ESA is at 16 U.S.C. § 1533(a)(1).

¹⁸⁸ This was accomplished via a rider to a Department of Defense appropriations bill, found at Pub. L. 112–10, 125 Stat. 38, § 1713 (2011). *See also* Williams, *supra* note 30, at 138.

¹⁸⁹ *Alliance for the Wild Rockies v. Salazar*, 672 F.3d 1170, 1174 (9th Cir. 2012).

¹⁹⁰ *Humane Society of United States v. Zinke*, 865 F.3d 614-615. This case was introduced at *supra* note 180 and accompanying text.

¹⁹¹ *See* Williams, *supra* note 30, at 146-147.

¹⁹² *See supra* note 188 and accompanying text.

¹⁹³ For a summary, *see* Earthjustice, *Timeline: The Fight for Northern Rocky Gray Wolves*, <https://earthjustice.org/features/campaigns/wolves-in-danger-timeline-milestones>. *See also* Katie Shepherd, *Montana's Governor Broke Rules to Kill a Yellowstone Wolf. A State Agency Gave Him a Warning*, WASH. POST (Mar. 24, 2021), <https://www.washingtonpost.com/nation/2021/03/24/montana-greg-gianforte-wolf/>.

¹⁹⁴ For a summary, *see* U.S. Fish & Wildlife Service, *Gray Wolves - Western Great Lakes States: Timeline of Federal Actions*, <https://www.fws.gov/midwest/wolf/history/timeline.html>.

¹⁹⁵ *See* U.S. Fish & Wildlife Service, *Gray Wolves - Western Great Lakes States: Wolf Numbers in Minnesota, Wisconsin and Michigan (excluding Isle Royale) - 1976 to 2015*, https://www.fws.gov/midwest/wolf/population/mi_wi_nos.html.

¹⁹⁶ *See* Earthjustice, *Are Wolves Endangered?* <https://earthjustice.org/features/are-wolves-endangered>.

¹⁹⁷ *See* U.S. Fish & Wildlife Service, *Gray Wolves in the Northern Rocky Mountains*, <https://www.fws.gov/mountain-prairie/es/grayWolf.php>.

the jury is still out on whether numbers are now strong enough to ensure long-term survival rather than extinction, hunters and livestock owners would like to see the removal of federal protection for wolves at the national level. Consequently, the FWS removed the gray wolf from protection under the Endangered Species Act, as no longer endangered *or* threatened, in late 2020.¹⁹⁸ The public comments collected for this latest regulatory decision include promises of yet more citizen lawsuits claiming violation of ESA procedures;¹⁹⁹ the first such lawsuit was filed in January 2021 and is in progress at the time of writing.²⁰⁰

VI. Conclusion: On transparent species protection

Political pressure for or against the listing of vulnerable creatures in the official endangered species list, and a judicial focus on procedural minutiae rather than the spirit of environmental preservation, is a continual problem for the credibility of the Endangered Species Act and the viability of its mandates for the protection of the listed creatures. Political pressures on the Act never cease, and while environmentalists often bring lawsuits demanding tougher enforcement of the Act, economic development interests have exercised pressure in more insidious ways. For example, in 1995 lobbyists convinced the Republican-controlled Congress to enact a one-year moratorium on any new species listings.²⁰¹ During times of political pressure and Congressional budget cuts, the U.S. Fish & Wildlife Service has been known to designate newly researched creatures as “candidate species” to postpone regulatory decisions until the political winds change.²⁰² During the heavily pro-business administration of George W. Bush, Rep. Richard Pombo (R-Cal.), a former development industry lobbyist and unrepentant critic of the Endangered Species Act, initiated several abortive attempts to have it abolished in Congress while pressuring the FWS to ignore scientific evidence.²⁰³

Pressure on the Endangered Species Act does not always follow partisan lines; the administration of Barack Obama never outwardly opposed the listing of additional vulnerable creatures but still issued regulations that generally weakened the ability of the FWS to protect critical habitats.²⁰⁴ Donald Trump was never particularly vocal about the Act, but his administration made several relatively quiet moves to shrink protected habitat zones and reduce the ability of the FWS to require habitat protection actions by private landowners.²⁰⁵ And for the first time in the Act’s regulatory history, the FWS was strongly encouraged, though not quite forced, to include data on expected economic impacts when deciding to add a newly-researched creature to the official

¹⁹⁸ 85 Fed. Reg. 69,778 (Nov. 3, 2020). *See also* Roggenkamp, *supra* note 169.

¹⁹⁹ *See e.g.* Earthjustice, *Notice of Violation of the Endangered Species Act: 2020 Gray Wolf Delisting Rule*, public comment (Nov. 5, 2020), https://www.biologicaldiversity.org/campaigns/gray_wolves/pdfs/Gray-Wolf-60-Day-Notice.pdf.

²⁰⁰ *Natural Resources Defense Council v. Dep’t of Interior*, Case No. 21-cv-56 (N.D. Cal. 2021).

²⁰¹ *See* SALZMAN AND THOMPSON, *supra* note 17, at 260.

²⁰² *Id.*

²⁰³ *See* Michael Breen, *Briefing Paper on Congressman Pombo’s Endangered Species Bill*, press release, Environmental Defense Fund (Sept. 19, 2005), <https://www.edf.org/news/briefing-paper-congressman-pombos-endangered-species-bill>.

²⁰⁴ *See* Anna V. Smith, *Obama’s Mixed Impact on Endangered Species*, HIGH COUNTRY NEWS (Dec. 28, 2016), <https://www.hcn.org/issues/48.22/obamas-mixed-impact-on-endangered-species>.

²⁰⁵ *See* Norman M. Semanko, *Proposed Revisions to Federal Endangered Species Act Regulations: The Next Chapter in the Trump Regulatory Reform Agenda*, 62 *ADVOCATE* 32, 32 (2019).

endangered species list.²⁰⁶ Some of Trump's executive actions to weaken the ESA were reversed by President Joe Biden in June 2021.²⁰⁷

The political and legal disputes surrounding the ESA have made it one of the most manipulated federal statutes in American history, going through many rounds of attempted weakening and strengthening in Congress, while that body has also never allocated nearly enough budget money for the FWS to fully investigate the populations and habitats of all vulnerable creatures.²⁰⁸ Environmentalists do their own damage by focusing on iconic or controversial animals that may or may not be listed for protection, at the expense of other creatures that still need to be studied. This certainly has an impact on whether and how vulnerable creatures receive protection, based on passing political trends. The Endangered Species Act faces many challenges, but this article argues that the accuracy and transparency of the official list of vulnerable plants and animals is vulnerable in its own right.

The lesser-known informational focus of the Endangered Species Act is both a blessing and a curse for its public interest goals, not to mention the creatures that it strives to save from extinction. In substantive terms, the Act is not intended to turn vulnerable creatures into pieces of information by adding them to a list, but to later remove them from that list because they have recovered from the brink of extinction. But this happy outcome requires federal action that can only be initiated by a creature's appearance on that very same list. Therefore the list should be scientifically accurate and free of conflicts of interest, and citizens and government watchdogs should be furnished with transparent information on how it is compiled. This is how all of the officials involved can be held accountable.

The ESA has been partially successful in its mission. A 2019 scientific study determined that approximately 291 creatures had been saved from imminent extinction thanks to habitat protection mandated by the Act. Among species that had been listed for protection at any time, 39 had been delisted because their populations had fully recovered, though 26 had been delisted because they were believed to be or proven to be extinct.²⁰⁹ On the other hand, previous scientific studies had determined that only about 15% of the world's plant and animal species have been studied enough to know if their populations and habitats are vulnerable, and America's official endangered species list may only include about 10% of species that are in danger of becoming extinct.²¹⁰ Therefore the official list of species protected by the ESA raises issues of which creatures are listed—and which are *not* listed and why.

Thus, the most crucial piece of information mandated by the ESA—the official list of endangered species—does not adequately reflect the severity of the environmental problems it purportedly informs the public about, while delisting is not always an adequate indicator of the Act's ability to actually bring a species back from the brink of extinction.²¹¹ This makes the transparency

²⁰⁶ *Id.* at 34.

²⁰⁷ Dino Grandoni and Darryl Fears, *Biden Administration Moves to Bring Back Endangered Species Protections Undone under Trump*, WASH. POST (June 4, 2021), <https://www.washingtonpost.com/climate-environment/2021/06/04/biden-endangered-species/>.

²⁰⁸ See SALZMAN AND THOMPSON, *supra* note 17, at 255.

²⁰⁹ Noah Greenwald, Kieran F. Suckling, Brett Hartl, and Loyal A. Mehrhoff, *Extinction and the U.S. Endangered Species Act*, 2019 PEERJ (2019), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6482936/>. Of the 291 species that have been saved, many are still listed under the Endangered Species Act because they remain endangered or threatened even though they have escaped imminent extinction.

²¹⁰ See Davis S. Wilcove and Lawrence L. Master, *How Many Endangered Species are There in the United States?*, 3 FRONTIERS IN ECOLOGY AND THE ENVIRONMENT 414, 414 (2005).

²¹¹ See Jeffrey J. Rachliniski, *Noah by the Numbers: An Empirical Evaluation of the Endangered Species Act*, 82 CORNELL L. REV. 356, 363-64 (1997). The cited article builds upon a review of the book NOAH'S CHOICE: THE FUTURE OF ENDANGERED SPECIES (1995), in which authors Charles C. Mann and Mark L. Plummer proposed a moratorium on

of the official endangered species list and the accountability of the government officials who manage it all the more important, because the ESA encourages citizen oversight of government efforts to protect those species and their habitats.²¹²

Nature lovers surely appreciate the goals of the ESA, but may be unaware of two central characteristics of procedure-intensive environmental legislation as described in this article. First, substantive natural protection goals are bound to be subsumed by the narrow procedural focus of administrative jurisprudence. Second, procedure-oriented environmental legislation has revolutionized the use of information in the natural protection process and has greatly increased public participation in environmental regulation; but as this article shows, the potential usefulness of that information, and the true effectiveness of public participation, can be blunted by opaque and politicized agency behavior and the inability of citizens to achieve true accountability through retroactive judicial review.

The ESA can be a powerful check on rampant development and destruction of species habitats, but it has a crucial Achilles Heel – the official list of endangered species. The Act cannot begin to protect a creature’s habitat if it is not on this simple list, and the creation and management of this list is not so simple. Citizens cannot assume that this list is truly accurate or that the processes of its creation are transparent. The political dramas surrounding the listing and delisting of the northern spotted owl and gray wolf, among other more humble creatures, illustrate that the composition of the official list is often not based on objective science.

Concerned Americans should not assume that the noble goals of the Endangered Species Act are fully achievable in the regulatory and political realms.²¹³ Agency officials make subjective decisions, often under extreme political pressure, and the judiciary’s focus on paperwork procedures reduces the ability of citizens to hold those officials accountable. In turn, the integrity of the ESA’s official list of species worthy of protection is not as transparent as it should be, and its true accuracy is anyone’s guess. A true solution to this conundrum would require an unlikely revival of the judiciary’s public interest focus toward environmental statutes that it practiced in the 1970s, which would result in more substantive discussions of whether the Endangered Species Act is fulfilling its goals for all vulnerable plants and animals. Unless that happens, citizens must assume that the official list of endangered species is useful but incomplete, and new types of public knowledge strategies, scientific research, and volunteer actions may be necessary to prevent further extinctions.

the Endangered Species Act due to scientific uncertainty, inaccurate reporting, and lack of success in truly protecting vulnerable species.

²¹² 16 U.S.C. § 1540(g).

²¹³ See LAZARUS, *supra* note 10, at 208; SALZMAN & THOMPSON, *supra* note 17, at 44-45.