BISON TO BLUE WHALES: PROTECTING ENDANGERED SPECIES BEFORE THE ENDANGERED SPECIES ACT OF 1973

BY
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I. INTRODUCTION

In 1859, Charles Darwin described extinction as the unavoidable consequence of the struggle among the species. According to Darwin, eventually, "rare species will be . . . beaten in the race for life" by stronger, common species.[1]

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[1] CHARLES DARWIN, THE ORIGIN OF SPECIES 154 (Penguin Books 1982) (1859).

Darwin was writing about evolution generally, not about the human-caused extirpation of many of the world's plants and wildlife. Many Americans in the late nineteenth century, however, interpreted Darwin's work as a scientific justification for human-caused extinction. For them, the loss of wildlife was a tragic but inevitable cost of progress.

Nevertheless, some sought to protect certain species from the fate of the dinosaur and giant sloth. Mostly, they did this for clearly defined, self-serving reasons. Before the Endangered Species Act of 1973 (ESA), Congress deemed three kinds of species worthy of legislative protection: game species, "industrial" species (like commercial fish and fur-bearers that provided the raw materials for certain American industries), and a few species of charismatic megafauna representative of the national heritage. Examples from this latter category include bison, bald eagles, and blue whales. Not until the ESA did Congress attempt to protect species threatened with extinction regardless of their economic or aesthetic value.[2]

Prior to the ESA the federal government played a relatively minor role in the protection of wildlife. Indeed, the federal government did not pass wildlife legislation until the second half of the nineteenth century. Throughout the twentieth century, however, the federal government increasingly asserted its power to regulate wildlife, often at the expense of state authority. Thus, wildlife law, up to and including deliberation over the ESA, became a battleground between those who believed species required national protection and those who wished to preserve states' rights. As with many such battles, this one was largely fought in the courtroom.

The history of species protection also reflects broader trends in science and politics from the nineteenth century to 1973. To begin with, wildlife law resulted from the scientific understanding that certain species were in danger of becoming extinct absent some form of protection. Eventually, the emergence of ecology provided further justification for protecting all species, not just those with obvious value. Second, wildlife policy developed within the larger contexts of the conservation and environmental movements. The history of wildlife law up to the ESA, therefore, encapsulates the complex interaction of science, politics, and the law.

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[2] ESA § 4(b)(1)(A), 16 U.S.C. § 1533(b)(1)(A) (1997) (stating that species shall be listed as threatened or endangered "solely on the basis of the best scientific and commercial data available . . . . ").

II. EARLY UNITED STATES WILDLIFE LAW

The United States inherited a legacy of wildlife regulation from colonial government. As early as 1694, the Massachusetts Bay Colony imposed the first closed hunting season in North America. It applied to all deer within the colony. In 1708, certain New York counties established closed seasons on the heath hen, grouse, quail, and turkey.[3] [ik] In the seventeenth and eighteenth centuries, the colonists hunted not only for sport but for subsistence. As a result, hunting in many regions along the eastern seaboard rapidly depleted most popular game species.

Following colonial rule, the various states continued to promulgate wildlife laws, primarily to protect game species. In 1842, the U.S. Supreme Court approved such state regulation in *Martin v. Waddell*. The Court held that the states inherited the "prerogatives and regalities" of the crown and parliament.[4] Specifically, the Court referred to the power of the King, and now the states, to regulate lands, waters, and presumably wildlife, held within the "public trust."[5] Initially, this holding applied only to the original thirteen states. Three years later, however, in *Pollard v. Hagan*, the Supreme Court extended the public trust doctrine to all states admitted into the nation.[6]

During the nineteenth century, conflict between state and federal wildlife law was minimal because little federal wildlife law existed. Mostly, the federal government avoided intruding on state prerogatives by regulating only those species of wildlife living within federal lands outside state jurisdiction. The federal government did this under the authority of the property clause: "Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States."[7] In 1868, Congress passed a law prohibiting the killing of certain fur-bearing animals in the territory of Alaska.[8] Three years later, it created the Office of the U.S. Commissioner of Fish and Fisheries to conserve fisheries along the coasts and

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[3] *See* PETER MATTHIESSEN, WILDLIFE IN AMERICA 281 (1959).

[4] 41 U.S. 367, 416 (1842).

[5] *Id.* at 412.

[6] 44 U.S. 212, 223 (1845); *see also* Ward v. Race Horse, 163 U.S. 504 (1896) (applying equal footing doctrine, that all states shall be admitted with same rights and powers held by existing states, to question of state authority over wildlife).

[7] U.S. CONST. art. IV, § 3, cl. 2.

[8] Act of July 27, 1868, ch. 273, 15 Stat. 240 (repealed 1944).

navigable waterways.[9] Congress also took indirect steps to secure wildlife habitat. In the Forest Reserve Act of 1891, it gave the President authority to establish national forests from the public domain with the intent to protect timber, water, and wildlife resources from over-exploitation.[10] Thus, by the end of the nineteenth century, the federal government began to regulate wildlife living within the vast federal lands of the American West.

On the few occasions that federal actions or claims conflicted with state wildlife regulations during the nineteenth century, the courts generally favored the states. For example, in *Smith v. Maryland*, decided in 1855, the Supreme Court examined a Maryland law that regulated the taking of oysters from the state's waters. The defendant shipowner admitted violating the state law, but argued that because the United States licensed him to engage in coastal trade, the Commerce Clause protected him from state regulation.[11] The facts of this case resemble those of *Gibbons v. Ogden*. In that landmark case, the Supreme Court held that the Commerce Clause preempted state regulation.[12] In *Smith v. Maryland*, however, the Court held that state regulation of wildlife, even on navigable waterways, did not interfere with the exclusive federal power to regulate interstate commerce.[13]

In so holding, the Court simultaneously protected the exclusive right of the states to regulate fish and wildlife, and bolstered the Commerce Clause as a means of expanding federal regulatory power during the nineteenth century.[14] The Court justified its holding in *Smith v. Maryland* by analogizing Maryland's oyster regulation with state quarantine and health laws. These laws were traditional exceptions to the dormant commerce clause recognized by the Court in *Gibbons v. Ogden*.[15] The Court found state wildlife laws immune from dormant commerce clause claims because of the states' traditional power to protect the resources of state land and water held in public trust.[16] In 1876, the Court went

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[9] Act of February 9, 1871, 16 Stat. 593 (repealed 1964).
[10] Act of March 3, 1891, ch. 561, § 24, 26 Stat. 1103 (repealed 1976).
[11] U.S. CONST. art. I, § 8, cl. 3 ("The Congress shall have power . . . To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes . . . . ").
[12] 22 U.S. 1 (1824).
[13] 59 U.S. 71, 76 (1855).
[14] *See* LAWRENCE FRIEDMAN, A HISTORY OF AMERICAN LAW 261 (2d ed. 1985).
[15] *See Smith*, 59 U.S. at 76.
[16] *See id.* at 75.

even further by declaring that the states actually owned the fish and wildlife resources of public trust lands and waters. Accordingly, a state could regulate its fish and wildlife as it would regulate any other "common property."[17]

Supported by these rulings, states continued to promulgate fish and game laws to protect food supplies and the interests of sport hunters. Yet, the states either could not or would not do anything about the rapid disappearance of the bison from the Great Plains during the 1870s. Primarily, this was because most of the Great Plains remained territories of the United States not yet organized and admitted as states. Those states that did support bison populations during the 1870s, Kansas, Nebraska, Texas, and Colorado, did nothing to protect the bison until it was too late. For example, the Texas State Legislature rejected outright a bill to impose a closed hunting season because of the belief that eradicating the bison would facilitate the pacification and removal of hostile Indian tribes. Colorado and Kansas adopted closed seasons on buffalo hunting in 1875, but only after few individual bison remained within their borders.[18] In the absence of state action, many Americans called on Congress to protect the American bison.

III. FEDERAL EFFORTS TO PROTECT THE AMERICAN BISON

The story of the bison is significant to the history of endangered species protection for several reasons. First, the bison's fate illustrates how quickly the forces of modernization can drive one species to the brink of extinction. The forces relevant to the bison included westward expansion and settlement, the introduction of competing species such as cattle, and the gruesome efficiency of market hunting. Second, the bison's plight provoked the first federal effort to protect a particular species. Finally, efforts to protect the bison were motivated more by a desire to preserve a symbol of the nation's heritage than to conserve a resource for sport or market hunters. Ultimately, the congressional attempts to protect the bison during the 1870s foreshadowed the growing role of the federal government in wildlife law during the twentieth century.

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[17] McCready v. Virginia, 94 U.S. 391, 395 (1876).

[18] *See* JAMES TREFETHEN, AN AMERICAN CRUSADE FOR WILDLIFE 16 (1975).

Bison once numbered about twenty-five million on the Great Plains.[19] As late as 1871, observers described the bison ranging in "countless herds."[20] At about this same time, market hunting for buffalo hides began in earnest, facilitated by the expansion of the railroad. These hides were used primarily to make leather machine belts crucial to the factories of the east. Bison were also killed for sport and, to a lesser degree, for meat. In 1871, one *New York Times* reporter asked a buffalo hunter, "will you not in time exterminate these animals?" The hunter replied, "It is impossible; they are as countless as the blades of grass on the plains, and though thousands are slaughtered, there seems to be no dimmution of numbers . . . . It will take a hundred years, almost, to make them scarce, for their range of country is so immense."[21]

Yet, just a year later, the *New York Times* reported that the "enormous slaughter" of the American bison was rapidly leading to that animal's disappearance on the Great Plains.[22] With the decline of the bison came a reassessment of the bison hunter. In 1871, the *Times* described the buffalo hunter as a "brave, wild set, true frontiersmen, making their money easily, and spending it freely."[23] In 1872, it wrote, "There is as much honor and danger in killing a Texas steer as there is in killing a buffalo . . . . It would be equally as good sport, and equally as dangerous, to ride into a herd of tame cattle and commence shooting indiscriminately."[24] The *Times* characterized the killing of the bison as "wanton" and as a "wholesale butchery" that was as "needless as it is cruel."[25] The article concluded by urging its readers to lobby Congress to protect the bison.[26]

In 1874, Congress passed a bill to save the bison from extermination. The bill made it unlawful for any person not an Indian to kill or wound any female buffalo found within the territories of the United States. A second provision of the bill prohibited any person from killing or wounding any greater number of male buffaloes than could be used, cured, or preserved for food or for the mar-

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[19] *See* Richard White, *Animals and Enterprise*, *in* THE OXFORD HISTORY OF THE AMERICAN WEST 249 (Clyde A. Milner II et al. eds., 1994).
[20] *The Buffalo Meat Business*, N.Y. TIMES, March 26, 1871, at 6.
[21] *Id.*
[22] *Extinction of the Buffalo*, N.Y. TIMES, July 22, 1872, at 3.
[23] *The Buffalo Meat Business*, *supra* note 20, at 6.
[24] *Buffalo Slaughter*, N.Y. TIMES, Feb. 7, 1872, at 2.
[25] *Id.*
[26] *See id.*

ket.[27] Violators were subject to $100 fine for each buffalo killed or injured. Second-time offenders could also face up to thirty days in jail.

While the Senate passed the bill without debate, the House split over several points. Those who supported the bill argued that bison required conservation because they were a vital food source for both Indians and white settlers. They also emphasized that hides and other body parts provided raw materials necessary for industrial expansion. Some simply argued that bison were "noble game" worthy of protection from "reckless slaughter."[28] National legislation was required, one Member of Congress concluded, because bison are migratory animals, moving from state to state and through the territories so that no one state could regulate for their protection.[29]

Many in the House, however, opposed the bill. Some argued that buffalo should not be protected because they roamed about wild, competing with domestic livestock for pasture. One Member of Congress complained that bison were "as uncivilized as the Indian."[30] Most opponents objected to the bill because protecting bison would mean protecting the semi-nomadic, hunting lifestyles of the Plains Indians, thus interfering with the pacification and "civilization" of the Indian.[31] Finally, some in Congress believed that the law would be useless, as the eradication of buffalo was the inevitable price of westward expansion and settlement.

Nevertheless, the bill passed the House and proceeded to President Grant for his signature. But Grant refused to sign the bill into law and it died as a result of his pocket veto. It is difficult to determine exactly why President Grant opposed protecting the bison, as no record exists giving his reasons. It is probable, however, that he agreed with his Secretary of Interior and with the members of Congress who spoke out against the bill during congressional deliberations. In his annual report for 1872, Secretary of Interior Columbus Delano wrote that the destruction of bison and other game on the Great Plains forced the Indians "toward industrial pursuits and peaceful habits" on the reservations.[32] For President Grant, protecting the bison would exacerbate the Indian problem.

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[27] *See* 1874 CONG. REC. H2105 (daily ed. Mar. 10, 1874).
[28] *Id.* at H2106.
[29] *See id.* at H2108.
[30] *Id.* at H2107.
[31] *Id.*
[32] COLUMBUS DELANO, ANNUAL REPORT OF THE SECRETARY OF THE INTERIOR 7 (1872).

In 1876, Congress again considered legislation for the protection of bison. It was identical to the bill considered four years earlier. What differed was that in the intervening years the number of bison left on the plains had plummeted even farther to where only "hundreds" remained.[33] Agriculture was added to the list of reasons justifying the bison's eradication. One Congressman stated that "the annihilation of the buffalo is not only predestinated, but a necessity to the successful cultivation of the soil of the western Territories."[34] Nevertheless, the essential arguments for and against protecting the bison remained similar to what they had been in 1872. In February of 1876, the House passed the bill 104 votes to 36.

The Senate version of the bill, however, never made it through committee. Again, it is difficult to ascertain why with any certainty, but it is probable that the Indian question played an important role. During the House deliberations, many agreed with the opinion of Congressman Throckmorton that "for the civilization of the Indian and the preservation of peace on our borders the more buffaloes are exterminated the better it will be for our country."[35] Senate support for the bill probably died on June 25, 1876, along with General George Armstrong Custer and 264 soldiers from the 7th Cavalry. The Battle of the Little Bighorn shocked the nation, reminding it that Indian resistance to westward expansion was not yet a thing of the past. Congress never passed a law prohibiting the taking of bison.

Protection for free-roaming herds of bison on the Great Plains soon became moot. In 1883, the *New York Times* reported that the appearance of a single buffalo in the northern plains was an "exceedingly rare occurrence" when just ten years prior the buffalo were as numerous as cattle.[36] One year later, the *Times* reported that the "noble bison" was on the "eve of final extinction."[37] At the end of the century, William T. Hornaday, Superintendent for the National Zoological Park in New York, lamented the "wanton destruction of a valuable beast, purely and distinctly American in its character." He estimated that only eighty-six bison remained in the United States and warned that efforts should be taken to protect other species of American mammals from the fate of the buffalo.[38]

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[33] 1876 CONG. REC. H1238 (daily ed. Feb. 23, 1876).
[34] *Id.* at H1241.
[35] *Id.* at H1239.
[36] *The Buffalo Slowly Disappearing*, N.Y. TIMES, Sept. 10, 1883, at 5.
[37] *The End of the Buffalo*, N.Y. TIMES, Dec. 26, 1884, at 3.
[38] *See Killing of the Buffalo*, N.Y. TIMES, July 26, 1896, at 20.

Eventually, federal protection for the bison came not from laws prohibiting their taking, but from the creation of preserves and parks. The establishment of Yellowstone National Park in 1894, for example, provided crucial habitat for the few remaining bison, preventing them from becoming completely extinct in the United States.[39] In 1907, Hornaday called for the expansion of federal and state reserves where bison could range unmolested and free. He argued that the federal government should take measures to rehabilitate bison populations for two reasons. First, he wrote that the extinction of the "grandest bovine animal of our time," whose history is "interwoven with the history of our westward course of empire, would be a National disgrace and calamity." He also argued that cross-breeding healthy bison populations with cattle would result in superior meats and hides.[40] The next year, in 1908, Congress created a National Bison Range in Montana.[41]

IV. THE LACEY ACT OF 1900

In 1896, the same year Hornaday observed that only eighty-six bison remained in the United States, nineteenth-century wildlife jurisprudence culminated in the Supreme Court case of *Geer v. Connecticut*.[42] In that case, the defendant Geer appealed his conviction under a Connecticut statute forbidding the out-of-state transport of game birds taken within the state. Again the Court considered whether a state law improperly interfered with the Commerce Clause, and again the Court found that it did not. In their decision, the Court wrote that states have the "undoubted authority to control the taking and use of that which belonged to no one in particular but was common to all."[43] In effect, the states "own" the wildlife, which they hold in public trust.[44] The Court concluded that because "common ownership imports the right to keep the property . . . always within its jurisdiction for every purpose," state fish and game laws do not implicate the Commerce Clause.[45]

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[39] Act of May 7, 1894, ch. 72, 28 Stat. 73. *See generally*, ALFRED RUNTE, NATIONAL PARKS (2nd. ed., 1987) (describing importance of national parks for wildlife preservation).

[40] *See Bison Preserves*, N.Y. TIMES, Nov. 3, 1907, at 8.

[41] *See* Act of May 23, 1908, ch. 192, 35 Stat. 267 (codified as amended at 16 U.S.C. § 671).

[42] *See* 161 U.S. 519 (1896).

[43] *Id.* at 523.

[44] *Id.* at 529.

[45] *Id.* at 530.

Almost as soon as the courts articulated this state ownership doctrine, however, it began to erode. The first significant direct step toward national wildlife regulation came when Congress passed the Lacey Act of 1900. The Act's sponsor, Representative John Lacey (R-IA) believed that states alone could not prevent species extinction; national action was required.[46] The Lacey Act relied directly on the commerce power to make it a federal crime to transport in interstate commerce wild animals, birds, or their products killed in violation of state law. [47] The Supreme Court never addressed the constitutionality of the Lacey Act, but the few lower courts that did confront the issue upheld the law as a permissible exercise of the commerce power.[48] The Lacey Act, however, in no way preempted state wildlife regulation, but it did mark the federal government's first significant foray into wildlife protection.[49]

The Lacey Act can best be understood as part of a package of federal legislation embraced by progressive conservationists around the turn of the twentieth century. Progressive conservationists were utilitarian; they believed that the nation's natural resources, including wildlife, needed to be managed to achieve the greatest good for the greatest number of Americans. Progressive conservationists had faith in science, efficiency, and expert management through government agencies. [50] Eventually, many came to believe that federal management would produce better science and be more efficient than state management. In contrast to preservationists, conservationists advocated the efficient development of the nations' resources. Progressive conservationists wanted to conserve wildlife for use by sport hunters and market interests, not merely preserve wildlife from extinction.

No one better represented national progressive conservationism than Theodore Roosevelt, who became President in 1901 after an assassin's bullet ended the presidency of William McKinley. A founding member of the Boone and Crockett Club, an exclusive hunting club with powerful members, Roosevelt cared deeply and vigorously about the fate of wildlife. In 1903, he created the

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[46] *See* 33 CONG. REC. H4871 (daily ed. 1900) (statement of Rep. Lacey).

[47] Act of May 25, 1900, ch. 553, § 3 (codified as amended at 16 U.S.C. § 3372(a)).

[48] *See, e.g.*, Rupert v. United States, 181 F. 87 (8th Cir. 1910).

[49] *See* New York v. Hesterberg, 211 U.S. 31, 41 (1908) (holding that "laws passed by the states in the exertion of their police power, not in conflict with laws of Congress upon the same subject, and indirectly or remotely affecting interstate commerce, are nevertheless valid laws.").

[50] *See generally* SAMUEL HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT, 1890–1920 (1963).

first national refuge explicitly for the protection of wildlife on Florida's Pelican Island. Sport hunters also began to call for the expansion of forest reserves to protect the habitat of game mammals, birds, and fish.[51] For this and other conservationist goals, Roosevelt obliged by more than doubling the acreage of national forest reserves, renamed National Forests in 1907, before Congress withdrew his power to do so.[52] In these ways, Theodore Roosevelt contributed greatly to wildlife conservation through the preservation of habitat.

V. THE MIGRATORY BIRD TREATY ACT OF 1918

Progressive conservationists also took other steps to protect endangered wildlife. In particular, they believed that federal law might best protect the dwindling populations of migratory birds. These birds fell prey not only to sport hunters, but also to market hunters harvesting feathers to feed Victorian fashion. In 1905, for example, the *New York Times* blamed the extermination of the Snowy Heron and the American Egret on the feathered hats favored by women.[53] New York State attempted to halt the feather trade by passing a law in 1906 prohibiting the possession of plumage of certain wild birds with the intent to sell them.[54] Scattered state and local law, however, did little to protect migratory species of birds, which ranged thousands of miles in the course of a year.

Moreover, state action often came too little and too late. In Massachusetts, for example, the Chair of the Fisheries and Game Commission approached the state legislature for emergency funds to protect the heath hen from "total extinction." By that time, however, the few hens remaining were confined to the island of Martha's Vineyard. Their numbers were so reduced that the Commissioner wanted the money so that he could buy artificial incubators.[55] Even the states themselves recognized the necessity of federal legislation if migratory birds were to be protected.[56]

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[51] *See* John F. Reiger, *Wildlife, Conservation, and the First Forest Reserve*, *in* THE ORIGINS OF THE NATIONAL FORESTS 106 (Harold K. Steen, ed., 1992); *also see generally* John F. Reiger, *Wildlife, Conservation, and the First Forest Reserve*, *in* AMERICAN FORESTS (Char Miller, ed., 1997).

[52] *See* CHRISTOPHER MCGREGORY KLYZA, WHO CONTROLS THE PUBLIC LANDS? MINING, FORESTRY, AND GRAZING POLICIES, 1870–1990 69 (1996).

[53] *See White Heron Victim of Woman's Vanity*, N.Y. TIMES, Aug. 13, 1905, at 4.

[54] *See Prohibited Plumage Law*, N.Y. TIMES, June 1, 1906, at 1.

[55] *See To Save the Heath Hen*, N.Y. TIMES, June 3, 1907, at 2.

[56] *See States Favor Bird Laws*, N.Y. TIMES, Mar. 27, 1912, at 7.

Scientists also argued for national law. In 1911, for example, Hornaday wrote to the *New York Times* audience lamenting the extinction of the Carolina parakeet. He warned that unless drastic, national measures were taken, the whooping crane, the trumpeter swan, the great sage grouse, and the prairie sharp-tailed grouse would all go extinct. Interestingly, conservationists like Hornaday often appealed to the darker side of progressivism by blaming America's wildlife problems on immigrants. The conservationists believed that market hunters were primarily poor immigrants who did not respect or honor the proper sport hunter's ethic. Hornaday, for example, blamed the decimation of songbirds in New York on Italians. He warned that unless the federal government did something now, America's great-grandchildren "will find the United States as barren of wildlife as Italy is today."[57]

Proponents supported a federal law to protect migratory birds for several reasons. First, scientists like Hornaday seemed to agree that a national law was necessary to protect species that migrate far and wide. Second, many progressive conservationists had faith in the power of the federal government to enforce game laws where states could not. For example, one conservationist wrote to the *New York Times* that "those who have made a joke of local game laws may think twice before they try their jokes on the Federal Government, with its unequaled power of detection and apprehension and its inexorable justice for wanton offenders."[58] Others, like William Haskell, Counsel for the American Game Protective Association, wrote that not only was a national law necessary to protect birds, such a law would be a legitimate function of the federal government under the Commerce Clause. He noted how courts have increasingly recognized the prerogative of the federal government to regulate all matters related to interstate commerce, even if it would impose on traditional state concerns, like the regulation of wildlife.[59]

In 1914, the last passenger pigeon died in a zoo in Cincinnati. At one time, flocks of these birds covered American skies in the hundreds of thousands. Indeed, scientists believe that no other species of bird ever approached the passenger pigeon in numbers. Estimates of their peak population range to three billion, at one time comprising twenty-five to forty percent of the total United States

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[57] *Shall We Give Posterity A Gameless Country?*, N.Y. TIMES, Feb. 5, 1911, at 5.
[58] *Bird Law In Effect*, N.Y. TIMES, Oct. 8, 1913, at 10.
[59] *See* William S. Haskell, *Will Federal Courts Assure Birds Free Use of Air?*, N.Y. TIMES, May 22, 1913, at 7.

bird population. Yet, within a relatively short period, hunting and habitat modification by humans caused the passenger pigeon population to crash to a point where it could no longer recover. Various state laws passed during the late nineteenth century to protect the passenger pigeon proved ineffective. [60]

In 1916 the federal government stepped in to protect migratory birds, motivated in part by the passing of the pigeon. It did so by signing a treaty with Canada, the Convention for the Protection of Migratory Birds, recognizing both the national and international scope of the species extinction crisis.[61] Two years later, Congress ratified this treaty with the Migratory Bird Treaty Act of 1918.[62] The Act made it a federal offense to capture, kill, possess, purchase, sell, barter, or transport any bird protected by the treaty, excepted as permitted by regulation of the Secretary of the Interior.[63] While earlier federal action had relied on the Commerce Clause or the power to regulate the public domain, the effort to protect migratory birds from extinction drew from the federal government's treaty making power.[64]

The state of Missouri, however, promptly challenged the constitutionality of the new law. Missouri claimed that the Tenth Amendment, which reserves powers not specifically delegated to the federal government to the states, combined with the state ownership doctrine granted states the exclusive power to regulate wildlife.[65] In the landmark decision of *Missouri v. Holland*, the Supreme Court upheld the Act as a valid exercise of the federal treaty making power. Moreover, it rejected outright the contention that the state ownership doctrine precluded federal regulation.[66] This decision paved the way for further federal action, and in 1929 the Migratory Bird Conservation Act supplemented the Migratory Bird Treaty Act by authorizing the Secretary of the Interior to acquire and establish bird refuges within the public domain.[67]

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[60] *See* A.W. SCHORGER, THE PASSENGER PIGEON: ITS NATURAL HISTORY AND EXTINCTION 199, 205, 214, 224-30 (1955).

[61] Convention for the Protection of Migratory Birds, Aug. 16, 1916, United States-Great Britain (on behalf of Canada), 39 Stat. 1702, T.S. No. 628.

[62] Ch. 128, 40 Stat. 755 (1918) (codified as amended at 16 U.S.C. §§ 703-711).

[63] *See id.* at § 2 (16 U.S.C. § 703).

[64] *See* U.S. CONST. art. II, § 2, cl. 2.

[65] *See* U.S. CONST. amend. X.

[66] Missouri v. Holland, 252 U.S. 416, 434-35 (1920).

[67] Migratory Bird Conservation Act of 1929, Ch. 257, 45 Stat. 1222 (codified as amended at 16 U.S.C. §§ 715-715r (1994)).

VI. Federal Laws for the Conservation of Commercial and Game Species

During the first couple of decades of the twentieth century, progressive conservationists remained remarkably united in blaming market hunters for species depletion and praising sport hunters for species conservation. Beginning noticeably in the 1920s, however, certain organizations and prominent conservationists began to criticize sport hunters. In 1920, for example, the Long Island Fish and Game Protective Association formed to protest game laws that they believed were interpreted for the benefit of clubs of wealthy sportsmen rather than for residents of Long Island.[68] As game laws became more restrictive, especially for migratory birds, many sport hunters and their organizations began to chafe.[69] In 1925, Hornaday argued that the growing number of extinct and endangered species proved that America's six million sport hunters could not regulate themselves.[70] A *New York Times* article that same year admonished that "wise sportsmen" should support federal laws like the Migratory Bird Treaty Act.[71]

The onset of the Great Depression in 1929 posed even more serious problems for species conservation. The New York State Conservation Department, for example, reported that poaching had increased in the state due to the economic hardship brought about by the Depression.[72] In addition, the drought that turned much of the American West into a dust bowl also significantly reduced waterfowl habitat throughout the country, requiring emergency regulations shortening the hunting season to avoid the "calamity of extermination."[73] At the Seventeenth Annual American Game Conference, President Hoover declared that "along with the industrial and farming crisis, this country was also facing a fish and game crisis." He said that the duress of depression should not hinder greater efforts to protect and propagate "useful" wildlife.[74] Yet, despite the rhetoric, the Hoover administration did little to expand the scope of federal wildlife law.

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[68] *See Long Islanders Fight Club Hunters*, N.Y. Times, Jan. 20, 1920, at 19.
[69] *See* Editorial, *Needless Hunting and Fishing Laws*, N.Y. Times, Apr. 22, 1926, at 24.
[70] *See* William Hornaday, *Hunters Menace All Birds*, N.Y. Times, Mar. 29, 1925, at 11.
[71] *More Ground for Ducks*, N.Y. Times, Feb. 4, 1925, at 20.
[72] *Rise In Poaching Laid to Depression*, N.Y. Times, Dec. 8, 1931, at 31.
[73] *Hoover Asks Hunters to Keep Duck Season; Would Avoid "Calamity of Extermination,"* N.Y. Times, Aug. 27, 1931, at 9.
[74] *Hoover Backs Move to Preserve Game*, N.Y. Times, Dec. 2, 1930, at 32.

As in so many other areas, New Dealers significantly extended federal involvement in species protection. In 1932, Congress created a Special Committee on Conservation of Wildlife Resources to investigate and coordinate all federal efforts to conserve wildlife. In the hearings of this committee in 1934, Jay Darling, Chief of the Bureau of Biological Survey, reported that the most pressing problem in wildlife conservation remained the restoration of migratory waterfowl. He testified that despite the Migratory Bird Treaty Act, the migratory waterfowl population in the United States had plummeted more than seventy-five percent since 1910.[75] He argued that the federal government needed to do more to protect wildlife, and assured the chair of the committee that federal efforts would not necessarily usurp states' rights.[76]

Darling also informed Congress about the history and role of the Bureau of Biological Survey. It was organized in 1885 within the Department of Agriculture as the Division of Economic Ornithology and Mammalogy. In 1896 the name changed to the Division of Biological Survey, and in 1905 to the Bureau of Biological Survey. Darling described how at first it was purely a scientific, investigatory agency, but how in recent decades it had become the lead federal agency for wildlife conservation (and for the extermination of predatory and "other undesirable species").[77] In 1934, the Biological Survey administered 2.6 million acres of wildlife sanctuary, not including lands in Alaska.

Representatives from other federal natural resource agencies also testified at the 1934 hearings. Arno Cammerer, Director of the National Park Service, urged Congress to protect several species of "fur bearers, notably the wolf, wolverine, badger, otter, and fisher" to prevent their otherwise likely extermination.[78] Ironically, the Biological Survey at the time was actively engaged in the destruction of several of these species as part of its mission to control predators for the sake of the livestock industry. A representative of the U.S. Forest Service also urged Congress to extend the federal protection for wildlife. According to the Forest Service, wildlife should be protected because of its growing recreational value and for economic reasons associated with outdoor recreation.[79]

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[75] *See Conservation of Wildlife: Hearings Before the House Special Comm. on Conservation of Wildlife*, 73rd Cong. 7 (1934).
[76] *See id.* at 13.
[77] *Id.*
[78] *Id.* at 129.
[79] *See id.* at 20.

The same month as the hearings, Congress passed the Fish and Wildlife Coordination Act.[80] For the first time ever, this law recognized that industrialization threatened wildlife habitat. Congress directed the Secretary of the Interior to investigate the effects of "domestic sewage, trade wastes, and other polluting substances on wildlife."[81] The Act also foreshadowed later laws by encouraging dam-building agencies to consult with the Bureau of Fisheries about the potential impact on fish before a dam was built.[82] The strictly procedural and voluntary nature of these two provisions made the Act weak. Nevertheless, at least the connection between indirect habitat degradation and wildlife health was acknowledged.

The Fish and Wildlife Coordination Act also proposed that federal lands be set aside to protect wildlife habitat.[83] This third provision realized some success through the expansion of national forest reserves, national wildlife refuges, and the national park system throughout the 1930s. In particular, the passage of the Migratory Bird Hunt Stamp Act in 1934, popularly known as the Duck Stamp Act, led to the dramatic expansion of the national wildlife refuge system. The Stamp Act required waterfowl hunters to purchase stamps from the federal government as licenses to hunt. The money thus generated went directly toward the acquisition of waterfowl habitat, which the federal government then protected as a wildlife refuge.

VII. FEDERAL LAWS PROTECTING "CHARISMATIC MEGAFAUNA"

At the beginning of his second term in office, President Roosevelt renewed his administration's commitment to fish and game conservation by pledging new legislative efforts to protect wildlife.[84] To this end, in 1936 President Roosevelt convened the North American Wildlife Conference, attended by state and federal agencies, private interest groups, and representatives from Canada and Mexico. F.A. Silcox, conference chair and Chief of the U.S. Forest Service, demonstrated sophisticated appreciation for species conservation by arguing that wildlife should be protected for scientific, esthetic, spiritual, and recreational

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[80] Act of March 10, 1934, ch. 55, 48 Stat. 401 (codified as amended at 16 U.S.C. §§ 661-667e).
[81] *Id.* § 2.
[82] *See id.* § 3.
[83] *See id.* §§ 1, 3.
[84] *See President Pledges New Wild Life Aid*, N.Y. TIMES, Oct. 2, 1936, at 2.

reasons.[85] Perhaps more significantly, Ben Thompson from the National Park Service led a session on the "Problem of Vanishing Species."[86] The session revealed the increasing interest of the federal government in taking measures to prevent the ultimate extinction of species, even when these species were already so depleted that they no longer provided a sport or industrial resource. It also provides further evidence that the National Park Service took an early leadership role in trying to prevent species extinction.

Inspired by the North American Wildlife Conference, Congress's Special Committee on the Conservation of Wildlife Resources requested that early the following year the Bureau of Biological Survey prepare a report on its past, current, and future plans to protect wildlife. The Committee thought the report would provide them with information upon which to base further wildlife conservation legislation.

The report itself reveals how the Bureau of Biological Survey in the late 1930s perceived the extinction crisis and what it thought its role should be in addressing the problem. First, the Bureau believed that game species should be managed like a crop, "for game is a crop — a product of the land that can be grown like wheat, corn, or tobacco."[87] Second, the Bureau blamed the depletion of waterfowl, bison, elk, wild turkeys, bear, beaver, and other species primarily on "the white man's gun," rather than habitat degradation or other indirect causes.[88] Finally, the Bureau envisioned a minor role for itself in preventing species extinction because it believed it had jurisdiction only over those species found on federal lands. It saw its primary role as managing federal bird and wildlife refuges and providing states with scientific information about that status of endangered species.

The next year, in 1938, Jay Darling, former Chief of the Bureau of Biological Survey and then president of the General Wildlife Federation, testified before Congress about what it could do to protect wildlife. Specifically, he described several areas where the federal government had not taken action. Among these, he lamented the absence of any agency of the U.S. government empow-

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[85] STAFF OF SENATE SPECIAL COMMITTEE ON CONSERVATION OF WILDLIFE RESOURCES, 74TH CONG., REPORT ON WILDIFE RESTORATION AND CONSERVATION: PROCEEDINGS OF THE NORTH AMERICAN WILDLIFE CONFERENCE 1 (Comm. Print 1936).

[86] *Id.* at 639.

[87] STAFF OF SENATE SPECIAL COMMITTEE ON CONSERVATION OF WILDLIFE RESOURCES, 71ST CONG., REPORT ON WILDIFE AND THE LAND: A STORY OF REGENERATION 81 (Comm. Print 1937).

[88] *Id.*

ered to protect wildlife species against "total extermination."[89] He recommended that the Bureau of Biological Survey be given adequate authority to take such action as may be necessary to prevent the extinction of all "valuable wildlife species."[90] For Darling and most conservationists at the time, species worthy of protection included only migratory birds, game, fur bearers and commercial species of fish. Nevertheless, explicit concern for species extinction, rather than just general fish and game conservation, eventually led to greater federal involvement in national wildlife law.

Change, however, came slowly. In 1939, the Bureau of Biological Survey reported modest new initiatives in providing aid to the states, acquiring additional land, establishing more wildlife refuges, and implementing more intensive game management.[91] The Survey also testified on its use of the Civilian Conservation Corps to create suitable habitat for waterfowl by building dikes, dams, and other water control structures.[92] In 1940, Congress transferred the Bureau of the Biological Survey from the Department of Agriculture to the Department of the Interior, where the agency was renamed the U.S. Fish and Wildlife Service (FWS). At a minimum, the transfer represented a reevaluating of the idea that wildlife species should be treated as crops. In addition, the change in names revealed that the agency would no longer be simply a scientific agency, but that it would be a management agency in charge of conserving the nation's fish and wildlife resources.

FWS expanded its traditional role to include tracking extinction rates of threatened species, managing those species to prevent their extinction, and advocating legislation for additional administrative authority over endangered wildlife. Typically, however, these species not only had to be in danger of extinction, they had to be charismatic megafauna valuable for historic or symbolic reasons if not for sport or industrial ones. Of course, concern for these kinds of species pre-dated FWS, extending at least back to the bison. In the decades surrounding the turn-of-the-century, however, conservationists largely overlooked individual species in favor of protection for larger categories of big game, fish, and bird species. Ironically, when concern for an individual species resurfaced it centered

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[89] *Conservation of Wildlife: Hearings on H. Res. 11 Before the House Select Comm. on Conservation of Wildlife Resources*, 75th Cong. 192 (1938).

[90] *Id.* at 193.

[91] *See Conservation of Wildlife: Hearings on H. Res. 65 Before the House Select Comm. on Conservation of Wildlife Resources*, 76th Cong. 28-29 (1939).

[92] *See id.* at 30.

around a non-native species. Specifically, in the late 1920s conservationists lobbied for American game laws to protect African lions, which were being "slaughtered in large numbers" by American hunters. [93]

Next, during the 1930s, conservationists recommended legislative protection for the grizzly and brown bear. [94] In 1932, John Holzworth, Chairman of the Alaska Bear Committee for the New York Zoological Society and American Society of Mammalogists, testified before Congress that the Alaskan brown bears "are certainly of such character and fame that they should be sufficiently protected and preserved to prevent their extermination."[95] In 1934, scientists reported that only 1013 grizzly bears remained in the United States, not counting the territory of Alaska. The National Park Service argued that the grizzly bear deserved protection because it was "a fine American animal."[96] Congress, however, failed to pass legislation to protect grizzly or brown bears.

During the 1930s, Congress also considered protection for the bald eagle. House resolution 7994, introduced in 1930, would have made it illegal for any person to kill or capture a bald eagle, except when the eagle was in the act of destroying wild or tame lambs or fawns, or foxes on fox farms. During congressional deliberations over the bill, the National Audubon Society presented evidence that the bald eagle was in danger of extinction.[97] Representative August Andresen (R-MN), the sponsor of the bill, argued that the bald eagle should be protected because it "is the emblem of our national independence . . . . We protect the American flag and it seems to me logical that we might protect the emblem."[98] While the bill received the support of all major conservation organizations, the bill failed to pass the House due to opposition from the livestock industry, which viewed the eagle as a dangerous predator.[99]

In 1940 Congress passed a law to protect the bald eagle, in part due to the support of the newly reorganized FWS. In doing so, Congress noted that the United States had adopted the bald eagle as its national symbol in 1782. Since then it has become a "symbolic representation of a new nation under a new

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[93] *Wants Game Laws for African Lions*, N.Y. TIMES, Feb. 9, 1927, at 13.
[94] *Says Nation Seeks Game Fish Surplus*, N.Y. TIMES, Dec. 3, 1931, at 31.
[95] *Brown Bear of Alaska: Hearings Before the Senate Special Comm. on Conservation of Wildlife Resources*, 73rd Cong. 24 (1932).
[96] *Wildlife Restoration and Conservation*, *supra* note 85, at 650.
[97] *American Eagle Protection: Hearings Before the House Comm. on Agric.*, 71st Cong. 1 (1930).
[98] *Id.* at 2.
[99] *See id.* at 21, 26-27.

government in a new world."[100] As a result, the bald eagle "is no longer a mere bird of biological interest but a symbol of the American ideals of freedom."[101] The Act made it a federal crime to take, possess, sell, purchase, or trade in any bald eagle or its products, except within the territory of Alaska. The Act provided for a maximum penalty of $500 and six months in jail per violation.[102] Although there appears to be no Commerce Clause or treaty power justification for the Act, its constitutionality has never been challenged.[103]

The states noticed and resented the growing involvement of the federal government in wildlife conservation, but they found themselves in a difficult situation. While they appreciated federal aid in the form of money and scientific information about wildlife health, they also viewed wildlife regulation as the exclusive province of state power protected by the Tenth Amendment. For example, Seth Gordon, Vice President of the International Association of Game, Fish, and Conservation Commissioners and Executive Director of the Pennsylvania Game Commission, praised the "long strides" the federal government had taken in recent years to assist the states in wildlife conservation.[104] But he also argued that "the exclusive right of the several States to regulate and control the taking of wild game, a term herein used in its broadest sense, has been generally recognized in the Unites States from the very beginning."[105] He then criticized the usurping of state powers by the various federal agencies in recent years. Generally, the states appreciated federal aid and advice, but they also wanted to preserve their autonomy and traditional right to regulate wildlife.

World War II temporarily interrupted further progress in federal wildlife law, despite war rhetoric to the contrary. Just two weeks before Pearl Harbor, FWS Director Ira Gabrielson testified before Congress that "in the event of a national emergency, security will not rest upon arms alone." Gabrielson argued that wildlife conservation was crucial to the war effort because sport hunting and other outdoor recreational activities involving wildlife guard against "subversive tendencies" and preserve the "national morale."[106] The next year,

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[100] Bald Eagle Protection Act, Pub. L. No. 567, 54 Stat. 278, § 1 (codified as amended at 16 U.S.C. § 668).
[101] *Id.*
[102] *See id.*
[103] *See* MICHAEL BEAN & MELANIE ROWLAND, THE EVOLUTION OF NATIONAL WILDLIFE LAW 162 (3rd ed. 1997).
[104] *Conservation of Wildlife: Hearings on H. Res. 65 Before the House Select Comm. on Conservation of Wildlife Resources*, 76th Cong. 1 (1940).
[105] *Id.* at 3.
[106] *Conservation of Wildlife: Hearings on H. Res. 49 Before the House Select Comm. on Conservation of Wildlife Resources*, 77th Cong. 182 (1941).

Gabrielson reported that because of the war many FWS programs had been discontinued or greatly reduced in scope, despite growing evidence of a global species extinction crisis.[107] Instead, FWS's wartime mission was to manage wildlife so as to increase the food supply from game animals and to protect domestic livestock and crops through the control of predators, pests, and disease.[108]

In the long-term, however, the war contributed indirectly to greater federal management of wildlife. To begin with, pollution from wartime industries threatened fish and wildlife populations, generating federal efforts to minimize the impacts of pollution.[109] Moreover, wartime innovation and postwar prosperity led to a dramatic increase in outdoor recreation nationwide. Albert M. Day, the new Director of FWS, worried that this would further tax already scarce wildlife resources.[110] FWS assured the states that federal post war efforts to protect wildlife would not interfere or infringe on state management.[111] Initially, this appeared to be the case, as was evidenced by a bill to provide the states with expert assistance and funding for wildlife cooperation that won the support of most of the state game commissioners.[112]

Soon, however, the federal government began new initiatives to protect endangered wildlife, even at the expense of state prerogative. In 1950, for example, Congress considered an amendment to the Bald Eagle Protection Act of 1940 that would have extended that Act's prohibition against taking bald eagles to include the new state of Alaska. Proponents of the bill amendment argued that the "bald eagle should be protected as a symbol of independence and freedom."[113] Proponents also argued that protection in Alaska was crucial, as it was the only place where healthy, stable populations of bald eagles remained.[114] Opponents of the amendment, however, believed that the bald eagle could be

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[107] *See* GLOVER M. ALLEN, EXTINCT AND VANISHING MAMMALS OF THE WESTERN HEMISPHERE 2 (1942).

[108] *See Conservation of Wildlife: Hearings on H. Res. 49 Before the House Select Comm. on Conservation of Wildlife Resources*, 77th Cong. 72 (1942).

[109] *See Conservation of Wildlife Before the House Select Comm. on Conservation of Wildlife Resources*, 79th Cong. 1 (1946).

[110] *See id.* at 26.

[111] *See Conservation of Wildlife House Select Comm. on Conservation of Wildlife Resources*, 79th Cong. 45 (1945).

[112] *See generally Promoting the Conservation of Wildlife: Hearings Before the Subcomm. on Conservation of Wildlife Resources of the House Comm. on Merchant Marine and Fisheries*, 80th Cong. (1947).

[113] *Protection of the Bald Eagle: Hearings on H.R. 5507 and H.R. 5629 Before Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries*, 81st Cong. 14 (1950).

[114] *See id.* at 13.

adequately protected under state law and regulation.[115] Because of state opposition, the amendment failed.

A dozen years later, however, in 1962, Congress successfully extended federal protection to the golden eagle and enhanced protection for the bald eagle.[116] In part, Congress wanted to protect the golden eagle because it could easily be confused with the bald eagle, "the national symbol of the United States," especially when immature.[117] In addition, Congress sought to protect the golden eagle because it was endangered and because it was "one of the most spectacular and beautiful birds in America."[118] Most of the major conservation organizations supported the amendment, while several states and the livestock industry opposed it. Unlike in 1950, however, this amendment to the Bald Eagle Protection Act passed. By the early 1960s, an improvement in scientific understanding, the emergence of the modern environmental movement, and decreased deference to state authority had prepared the federal government to take over the protection of all the nation's endangered wildlife.

VIII. The Emergence of "Ecology"

Increasing federal involvement in wildlife protection is related to the emergence of ecology near the turn of the twentieth century. In essence, ecology is concerned with the interrelationship between organisms and their environment. The German biologist Ernst Haeckel first coined the term *oekologie* in 1873 from the Greek work *oikos*, or home. In 1892, chemist Ellen Swallow publicized the word in America, changing it to oekology, and in 1910 applied the term to human ecology.[119] In 1916, botanist Frederic Clements posited an influential ecological principle when he described organisms, if undisturbed by human or environmental catastrophic activity, as developing in succession until they reached a climax state of equilibrium.[120] In 1935, biologist Arthur Tansley introduced the concept of the ecosystem, in which organisms and the environmental factors

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[115] *See id.* at 1.

[116] *See* Act of Oct. 24, 1962, Pub. L. No. 87-884, 76 Stat. 1246 (codified as amended at 16 U.S.C. § 668(a)).

[117] *Protection for the Golden Eagle: Hearings Before the Subcomm. on S.J. Res. 105 and H.R.J. Res. 489 of the Senate Comm. on Commerce*, 87th Cong. 2 (1962).

[118] *Id.* at 12.

[119] *See generally* Ellen Swallow, Sanitation In Daily Life (1910).

[120] *See generally* Frederic Clements, Plant Succession (1916).

interact and develop in a way tending toward the creation of an equilibrated system.[121] According to Eugene Odum, writing in the 1950s and 1960s, biological diversity helped maintain the natural balance, or equilibrium, of the climax state.[122]

For Congress and the administration, these ecological principles had several implications. First, they implied that if left undisturbed by humans, nature tends toward harmony and balance, a sort of Eden that environmental policies should encourage. Second, maintaining maximum wildlife diversity is an essential ingredient of this Eden and species extinction a cardinal sin. Finally, because of the complex interaction and interrelationship of organisms and environmental processes, the loss of biological diversity through species extinction would have an incalculable but undoubtedly harmful effect on human society. The federal government, therefore, should do its utmost to prevent species from going extinct, even those species whose value is not apparent.

It is difficult, of course, to gauge how well policymakers understood these developments. Certainly, however, no one popularized ecological principles better than Aldo Leopold, now known as the father of modern wildlife management. In his classic, *A Sand County Almanac*, published posthumously in 1949, Leopold merged science, ethics, and nature writing into a bestseller that became a bible for many environmentalists and natural resource managers. Most significantly, Leopold translated the ecological principles of Clements, Tansley, and others into what he called the "land ethic." According to this ethic, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[123] As Leopold's essay "On a Monument to the Pigeon" indicates, human-caused extinction violated this ethic in the most egregious way.[124]

In some ways, the holistic science of ecology began to clash with the particular, special-interest based policies of FWS and the Department of the Interior. For example, in 1953 FWS proposed a plan to hire hunters and assign them to airplanes where they could systematically purge Alaska of predators like

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[121] *See* Arthur Tansley, *The Use and Abuse of Vegetational Concepts and Terms*, 16 ECOLOGY 284, 306 (1935).
[122] *See* Eugene P. Odum, *The Strategy of Ecosystem Development*, 164 SCIENCE 262, 270 (1969). Since the 1960s, much to the chagrin of environmentalists, the field of ecology has changed dramatically, emphasizing chaos and randomness rather than equilibrium and harmony. *See generally* DANIEL BOTKIN, DISCORDANT HARMONIES: A NEW ECOLOGY FOR THE TWENTY-FIRST CENTURY (1990).
[123] ALDO LEOPOLD, A SAND COUNTY ALMANAC 224-25 (commemorative ed. 1989).
[124] *See id.* at 108-10.

the wolf in order "to make the territory completely safe for reindeer, caribou, and moose."[125] FWS planned to supplement this aerial assault on predators by scattering poison pellets on animal carcasses across the Alaskan tundra. Scientists at the American Society of Mammalogists Conference, however, opposed the plan. In particular, they stressed the important role played by wolves and other predators in the Alaskan ecology by maintaining healthy and stable populations of ungulates and other species.

Such sentiments could have come directly from Leopold's essay, "Thinking Like a Mountain," in which Leopold drew from his experience as a young ranger for the U.S. Forest Service when he and his fellows "never heard of passing up a chance to kill a wolf."[126] Back then, like many conservationists, Leopold believed that fewer wolves meant more deer, and that "no wolves would mean a hunters' paradise."[127] But after shooting the wolf and seeing the "fierce green fire dying in her eyes," Leopold realized that "neither the wolf nor the mountain agreed with such a view."[128] For Leopold, the "mountain" was a metaphor for an ecosystem, the complex interaction of organisms and environmental factors that required the wolf as much as the deer in order to maintain equilibrium.

FWS and the Department of the Interior felt pressured, both internally and externally, to practice sound science in their conservation programs. Nevertheless, they also had to bow to the less-enlightened interests of sport hunters and the western livestock industry with their traditional prejudices against predator species. Throughout the 1950s and 1960s, therefore, agencies within the Department of the Interior worked both to conserve certain species and to eradicate others. By the late 1960s and early 1970s, however, the Department's predator control program came under increasing public criticism.[129] Finally, in 1972, President Nixon announced the promulgation of an executive order barring the use of poisons to control predators on all public lands.[130]

The 1950s failed to see any other substantial federal efforts to protect species. Indeed, on some fronts Eisenhower's administration appeared to backslide.

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[125] *Scientists Aloof On U.S. Wolf Hunt*, N.Y. TIMES, June 17, 1953, at 29.
[126] LEOPOLD, *supra* note 123, at 130.
[127] *Id.*
[128] *Id.*
[129] *See* Editorial, *A New Wildlife Policy*, N.Y. TIMES, July 7, 1965, at 36; *see also* Editorial, *'Cry Coyote,'* N.Y. TIMES, Feb. 27, 1972, § IV, at 12.
[130] *See* RICHARD NIXON, PUBLIC PAPERS OF THE PRESIDENTS OF THE UNITED STATES, 1972 183 (1974); *see also* Galdwin Hill, *A Polite Nudge on Environment*, N.Y. TIMES, Feb. 9, 1972, at 21.

For example, the Department of the Interior became more permissive in allowing extractive industries onto the national wildlife refuges, especially through oil and gas leasing. Representative Lee Metcalf (D-MT) described the problem as "a continued and growing attack upon the wildlife refuges of the Nation" and proposed a bill to prevent the Secretary of the Interior from disposing of the national wildlife refuges without the permission of Congress.[131] Overall, however, while Congress considered minor fish and wildlife legislation during the 1950s, it proposed no significant new protection for endangered species.[132]

By the 1960s, the political climate had changed dramatically. This change came not so much from the switch in presidential administrations, but from the grassroots up, as a growing awareness of environmental problems, including species extinction, fostered a national environmental movement. If the environmental movement had a beginning, it was in 1962 when Rachel Carson, a former biologist with FWS, published *Silent Spring*. In her book, Carson described how the nation's growing addiction to pesticides, herbicides, and insecticides poisoned wildlife and threatened human health.[133] The image of songbirds falling dead from suburban trees provided a graphic symbol of environmental destruction with which people could identify and empathize. More than any other single factor, Carson's book acted as a catalyst for the modern environmental movement.[134]

IX. THE ENDANGERED SPECIES ACTS OF 1966 & 1969

People and organizations concerned for wildlife, species extinction in particular, played a central role in the environmental movement of the 1960s. Late in 1961, for example, the World Wildlife Fund (WWF) formed to raise money to save the world's most endangered and deserving species from extinction. The *New York Times* reported that scientists with the WWF believed that "since the

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[131] *Wildlife Refuge Disposal Policy: Hearings Before the House Comm. on Merchant Marine and Fisheries*, 84th Cong. 1 (1956).

[132] *See, e.g., Miscellaneous Fish and Wildlife Legislation: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries*, 86th Cong. (1959); *see also Fish and Wildlife Legislation: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries*, 86th Cong. (1959).

[133] SEE RACHEL CARSON, SILENT SPRING (1962).

[134] *See* ROBERT GOTTLIEB, FORCING THE SPRING: THE TRANSFORMATION OF THE AMERICAN ENVIRONMENTAL MOVEMENT 81 (1993).

time of Jesus," about 200 species of mammals and birds had become extinct.[135] Almost seventy percent of those species became extinct during the last century, thirty-eight percent within the last fifty years. In 1961, WWF believed that $1.5 million would be sufficient to save the species most seriously threatened with extinction. These included the giant tortoise, the Ceylon elephant, the African mountain lion, the California condor, the whooping crane, and more than a dozen other species. WWF blamed most current extinctions on pollution of the sea, drought, poaching, poison and inundation from dams.[136]

The same year WWF organized, Congress considered a bill to protect marine mammals on the high seas. If it had passed, the bill would have prohibited the taking of polar bears, sea otters, and walruses. The sponsor of the bill, Representative John Saylor (R-PA), blamed the near extinction of these marine mammals on sport hunting. He claimed that Congress had the power to enact such a law because the takings prohibition applied on and along the coasts of the United States, where federal jurisdiction extended.[137] All of the major conservation organizations supported the bill, including the National Audubon Society, the Wildlife Institute, and the Izaak Walton League of America.

Although Congress failed to pass endangered species legislation early in the 1960s, the administration began to act toward this end under existing authority. In 1964, FWS created the Committee on Rare and Endangered Species, comprised of nine biologists. According to the Committee, thirty-five to forty species of North American animals had gone extinct within the span of U.S. history.[138] The Committee compiled the first list of species known to be threatened with extinction. The list included a total of sixty species: thirty-five species of birds, sixteen species of mammals, six species of fish, and three species of reptiles. The Committee identified the primary causes of species extinction as habitat destruction, overhunting, and pollution. As the administration began to closely study and track the extinction crisis, Congress indirectly protected endangered species by passing the Wilderness Act of 1964, thus preserving crucial habitat.[139]

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[135] *New Fund Seeks To Save Near Extinct Species*, N.Y. TIMES, Nov. 8, 1961, at 37.
[136] *See id.*
[137] *See Miscellaneous Fish and Wildlife Bills: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries*, 87th Cong. 7 (1961).
[138] *See* William M. Blair, *U.S. Studying Way To Save Wildlife*, N.Y. TIMES, July 7, 1964, at 16.
[139] Pub. L. No. 88-577, 78 Stat. 890 (codified as amended at 16 U.S.C. § 1131 (1985)).

Just a year later, however, in 1965, Congress considered bills that would directly protect endangered species. Hearings on these bills were significant for a number of reasons. First, they raised awareness about the scope of the extinction crisis. Secretary of the Interior, Stewart Udall, testified that since the founding of the nation, twenty-four birds and twelve mammals native to the United States had disappeared from the face of the earth. He warned that unless something was done soon some thirty-five mammals and thirty to forty species of birds would follow into extinction.[140] The bills also drew the support of an increasingly coordinated and powerful environmental lobby, including older conservation organizations like the National Audubon Society and newer organizations such as the Defenders of Wildlife. The hearings revealed, moreover, that these organizations were becoming increasingly critical of the administration's emphasis on protecting game species.[141]

The bills, if passed, would have protected more than just game animals. However, they would not have extended protection to all endangered species, only those listed by FWS. Those listed were overwhelmingly mammals or birds. Rhetoric on the floor of Congress emphasized charismatic megafauna. In the Senate, Secretary Udall urged the passage of a bill to protect species like "the whooping crane, trumpeter swan, prairie chicken, California condor, Kenai moose, Kodiak bear, Key deer, fur seal, and American bison."[142] Although the 89th Congress failed to pass an endangered species law during its first session in 1965, it seemed poised to do so during the second session.

Early in 1966, articles and editorials from the *New York Times* and other national papers advocated for the passage of endangered species legislation being considered by Congress. The *Times*, for example, reported that the whooping crane, California condor, and American bald eagle were among the seventy-eight species the Department of the Interior then considered endangered. According to scientists, only forty-four whooping cranes and thirty-eight condors remained alive. Significantly, the *Times* quoted Secretary Udall as advocating a law that, among other things, would require federal agencies to consider the

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[140] *Miscellaneous Fisheries and Wildlife: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries Legislation — 1965*, 89th Cong. 34 (1965).

[141] *See id.* at 134-35.

[142] *Conservation, Protection, and Propagation of Endangered Species of Fish and Wildlife: Hearings Before the Subcomm. on Merchant Marine and Wildlife of the Senate Comm. on Commerce*, 89th Cong. 5 (1965).

impact on endangered species before building dams, draining swamps, or harvesting timber.[143]

Soon after, a *Times* editorial argued that even seemingly valueless species should be protected for ecological reasons. Such species, the *Times* wrote, benefit humans because they advance scientific research and are part of the "vast web of life."[144] The editorial warned that, "Unless man, the giant predator, becomes the farsighted conservator of this planet, he may join the whooping crane, the great blue whale and the golden eagle as a threatened species."[145] In this way, the *Times* both reflected and perpetuated the popular understanding of ecology, the philosophical force behind the environmental movement.

Finally, in the fall of 1966, Congress passed the Endangered Species Preservation Act (hereinafter the 1966 Act).[146] As the first comprehensive legislative response to the modern extinction crisis, the 1966 Act marked a significant departure from the individual species protection laws of the past. The 1966 Act had several significant provisions. First, it required the Department of the Interior to continue compiling lists of endangered species.[147] It then directed the Departments of Interior, Agriculture, and Defense to protect those listed species "insofar as is practicable and consistent" with the primary purposes of the services, bureaus, and agencies within their departments.[148] Moreover, it required the Department of the Interior to consult with and "encourage" all other federal agencies to conform to the purposes of the Act "where practicable."[149]

In addition, the 1966 Act created the National Wildlife Refuge System out of a hodgepodge of wildlife refuges and other federal preserves. It authorized funds for the maintenance and expansion of this system.[150] Traditionally, the wildlife refuges had been managed primarily for waterfowl, but the 1966 Act directed FWS to manage those lands for other endangered species as well. Finally, the 1966 Act prohibited the "taking" of a species or their products within these wildlife refuges without a permit.[151]

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[143] *See Wildlife Species Face Extinction*, N.Y. TIMES, Jan. 9, 1966, at 48.
[144] Editorial, *Man, the Endangered Species*, N.Y. TIMES, Jan. 26, 1966, at 36.
[145] *Id.*
[146] Pub. L. No. 89-669, 80 Stat. 926.
[147] *Id.* § 1(c).
[148] *Id.* § 1(b).
[149] *Id.* § 2(d).
[150] *See id.* § 4.
[151] *Id.* § 4(c).

While the 1966 Act represented a great step forward in federal wildlife law, its scope and power were limited. First, the 1966 Act applied only to domestic, vertebrate species of fish and wildlife, and did not extend to plants, subspecies, or population segments. Moreover, because it protected only listed species and because FWS's list consisted overwhelmingly of mammals and birds, the 1966 Act, in practice, applied only to the limited number of species that had attracted FWS's attention. Second, the language of the Act made agency cooperation with the Act's purposes explicitly voluntary. Ideally, the various federal agencies were to consult with FWS before beginning or authorizing development projects to ascertain if those activities would further jeopardize listed species. In practice, the Act's voluntary and equivocal language enabled agencies to almost always avoid consultations and proposed federal action was therefore rarely halted.

Most importantly, the restriction against the taking of a species applied only within the National Wildlife Refuges. The 1966 Act did nothing to protect endangered species on private, state, or other federal lands. Moreover, the Act's taking prohibition did not extend to authorized activities on a National Wildlife Refuge that might indirectly harm a listed species. Despite these weaknesses, the 1966 Act announced that the federal government, not the states, would be responsible for addressing the extinction crisis. Unlike the regulation of fish and game for sport hunters, endangered species required national protection through federal law.

The next year, 1967, Congress considered bills to supplement the Endangered Species Preservation Act of 1966. In particular, members of Congress began to recognize the international scope of the extinction crisis and hoped to extend legislative protection to foreign jurisdictions. Senator Ralph Yarborough (D-TX) argued that while much had been done to protect endangered American species "such as the western bison, whooping crane, and bald eagle," the U.S. had done nothing as of yet to protect the "distinctive" species of other nations.[152] Dillon Ripley, Secretary of the Smithsonian Institute, testified that the large international market in animal skins and plumage posed a major threat to many of these endangered species.[153] Supporters of these bills in Congress hoped to prevent the extinction of these species by prohibiting the importation of them or

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[152] *Endangered Species: Hearings on S. 2984 and H.R. 11618 Before the Subcomm. on Merchant Marine and Fisheries of the Senate Comm. on Commerce*, 90th Cong. 25 (1968).

[153] *See Fish and Wildlife Legislation: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation of the Senate Comm. on Merchant Marine and Fisheries*, 90th Cong. 38 (1967).

their products. The 90th Congress, however, failed to pass such legislation in 1967 or 1968.

During this time, public support for stronger endangered species legislation grew as more Americans became aware of the scope and consequences of the extinction crisis. In 1967, the *New York Times* reported that FWS's list of endangered species had expanded to include seventy-eight species, including thirty-six species of birds, twenty-two of fish, fourteen of mammals, and six of reptiles and amphibians.[154] An editorial that same year warned that 250 species faced extinction, including the "blue whale, the polar bear and the leopard, the fearsome tiger and the humble alligator." The editorial blamed "man, the giant predator," who preys upon these animals for fashion and money.[155] Another editorial, printed a few weeks later, was more specific. It argued that the fur trade hastened the extinction of some of the rarest and most beautiful mammals on the planet.[156]

In 1969, Congress again considered several bills to prevent the importation of endangered species and their products. During congressional hearings, Senator Ralph Yarborough (D-TX) referred to the International Union for the Conservation of Nature and Natural Resources Red Data Book. This source listed 600 species of fish and wildlife as endangered worldwide. He argued that the rapid disappearance of many of the world's "most exotic and beautiful species" could be blamed on the fur and skin trade.[157] A study in 1972, for example, found that between 1968 and 1970 the U.S. market in skins and furs resulted in the importation of 18,456 leopard skins, 31,105 jaguar skins, and 249,680 ocelot skins.[158] In the United States, the primary victim of this trade was the alligator.

During congressional hearings, Congress heard from many interests both in support and in opposition to the bills. Once again, most major environmental organizations testified in support of the proposed law, including the National Audubon Society, Defenders of Wildlife, the National Wildlife Federation, and the Sierra Club. Certain industries, however, opposed the bills considered in 1969. Predictably, these included the organizations representing the fur and skin industries: The American Fur Merchants' Association, the Fur Brokers' Associa-

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[154] *See 78 Species Listed Near Extinction*, N.Y. TIMES, Mar. 12, 1967, at 46.
[155] Editorial, *Civilization's Prey*, N.Y. TIMES, Sept. 9, 1967, at 30.
[156] *See* Editorial, *Traffic in Savagery*, N.Y. TIMES, Sept. 19, 1968, at 46.
[157] *Endangered Species: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries*, 91st Cong. 21 (1969).
[158] *See* TOM GARRETT, *Wildlife*, *in* NIXON AND THE ENVIRONMENT 131 (1972).

tion of America, the General Hide & Skin Corporation, and the Tanners' Council of America.[159] Unlike the 1966 Act, the bills considered in 1969 would have a direct impact on certain clearly identified economic interests.

After much deliberation, the 91st Congress passed the Endangered Species Conservation Act of 1969 (hereinafter the 1969 Act).[160] The 1969 Act included several provisions designed to address the international scope of the extinction crisis. First, the 1969 Act directed FWS to expand the endangered species lists to include endangered species not found in the United States, and called for an international convention to discuss how to protect these species.[161] The 1969 Act then banned the importation of any such species or its product.[162] In addition, the 1969 Act extended the Lacey Act by prohibiting the interstate selling or transportation of endangered species of reptiles, amphibians, mollusks, and crustaceans.[163]

Finally, the 1969 Act expanded the definition of "fish or wildlife" beyond fish, mammals, and birds. Under the new definition, the 1966 and 1969 Acts would extend protection to endangered species of amphibians, reptiles, and invertebrates.[164] Thus, the 1969 Act broadened the kinds of species deemed worthy of legislative protection as well as recognizing the global sweep of the extinction crisis. Signing the bill into law, President Nixon called the 1969 Act "the most significant action this nation has ever taken in an international effort to preserve the world's wildlife."[165] In one of the few issues ever litigated under the 1969 Act, the Supreme Court held that the Act did not preempt a New York law prohibiting the importation of certain species not included on the federal endangered species list. In effect, federal endangered species law did not preempt stronger state laws.[166]

Over the next few years, the American public became even more informed about the scope and consequences of the extinction crisis. In 1969, James Fisher co-authored *Wildlife in Danger*, in which he observed that people were more

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[159] *See id.* at 133, 153; *see generally Endangered Species: Hearings on S. 335, 671, and 1280 Before the Subcomm. on Energy, Natural Resources, and the Env't of the Senate Comm. on Commerce*, 91st Cong. (1969).
[160] Pub. L. No. 91-135, 83 Stat. 275.
[161] *See id.* § 3(a), § 2.
[162] *See id.* § 2.
[163] *See id.* at § 7(a).
[164] *Id.* § (2).
[165] *Washington Records: The President*, N.Y. TIMES, Dec. 6, 1969, at 25.
[166] *See* A.E. Nettleton Co. v. Diamond, 27 N.Y. 2d 182, 264 N.E. 2d 118, 315 N.Y.S. 2d 625 (1970); *see also* Palladio, Inc. v. Diamond, 321 F. Supp. 630 (S.D.N.Y. 1970), *aff'd*, 440 F.2d 1319 (2nd Cir. 1971).

concerned than ever about the disappearance of wildlife.[167] He noted that a hundredth of the "higher" animals (mammals and birds) had become extinct since the year 1600, while a fortieth were currently threatened with extinction, mostly due to overhunting.[168] A year later, the *New York Times* publicized anthropologist Paul Martin's thesis that prehistoric human overhunting was primarily responsible for the extinction of dozens of large mammals, like the mastodon, during the Pleistocene era.[169] For many, Martin's overkill thesis served as a warning to modern human society.

In the early 1970s, environmentalists, scientists, and FWS managers began to consider the plight of endangered plants. In 1971, the *Times* reported that for the first time FWS would add plants to its list of endangered species, which already included some 800 species of wildlife. According to the article, most endangered species were animals such as "the eagle, the tiger, the giant otter, the crocodile, the condor, the whale and the rhinoceros."[170] According to scientists, about ten percent of the 20,000 plant species in the world were threatened with extinction. These plants, scientists argued, should be protected because of their potential as sources of food and medicine.[171]

X. Wildlife Protection Laws of the Early 1970s

Despite a growing appreciation for plants and other species of less obvious value, congressional preservation efforts during the early 1970s centered on charismatic megafauna as representative of the national heritage. In 1971, Congress passed the Wild Free-Roaming Horses and Burros Act. This act preserves what Congress called "living symbols of the historic and pioneering spirit of the West."[172] It prohibits the taking of wild horses and burros on all federal lands managed by the Forest Service and the Bureau of Land Management. Unlike the Endangered Species Protection Act of 1966, this Act is not limited in its application to only National Wildlife Refuges, although it is more limited in that it applies only to wild horses and burros. In 1976, the Supreme Court defended

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[167] James Fisher Et Al. Wildlife In Danger 7 (1969).
[168] *Id.* at 11, 13.
[169] Walter Sullivan, *Scientist Urges Rearing Lost Species' Relatives*, N.Y. Times, Mar. 17, 1970, at 24.
[170] Bayard Webster, *Plants Called Endangered, Along With Rare Animals*, N.Y. Times, Nov. 11, 1971, at 49.
[171] *See id.*
[172] Pub. L. No. 105-153, 85 Stat. 649 (codified as amended at 16 U.S.C. §§ 1331-1340 (1985)).

the Act against a constitutional attack by New Mexico when it held that the Property Clause of the U.S. Constitution "necessarily includes the power to regulate and protect wildlife" living on federal land.[173]

A year later, in 1972, Congress enacted the Marine Mammal Protection Act. Congress chose to protect marine mammals, such as blue whales, largely because of their apparent intelligence and their highly developed social systems — in short, because they seemed so human.[174] The central provision of the Act places a moratorium on the taking or importation of certain marine mammals threatened with extinction.[175] The Act, however, is far more complex than a mere prohibition on taking since it establishes a detailed, comprehensive program for the protection of marine mammals. Consequently, courts held that it replaced many existing state programs and preempted states from any authority over marine mammals.[176]

By 1972, however, scientists, environmentalists, and many policy analysts began to recognize the inadequacy of existing federal endangered species laws. G. Ledyard Stebbins, a professor of genetics at the University of California, Davis, argued before Congress that stronger federal legislation was needed to protect endangered species, especially plants, from extinction.[177] The *New York Times* quoted the president of the National Wildlife Federation, as saying that despite existing laws, the "world today stands in grave danger of losing many animals and plants which have given joy to countless generations."[178] William S. Boyd, writing in the *Stanford Law Review*, argued that the Constitution would permit the federal government to pass much stronger and more comprehensive endangered species legislation than the 1966 and 1969 Acts.[179] He and many others believed that such a law would be needed to save endangered species.

In 1972 President Nixon called for the adoption of "a stronger law to protect endangered species of wildlife."[180] He claimed that "even the most recent act to protect endangered species, which dates only from 1969, simply does not

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[173] Kleppe v. New Mexico, 426 U.S. 529, 541 (1976).
[174] *See* BEAN, *supra* note 103, at 110-11.
[175] Pub. L. No. 92-552, 86 Stat. 1027 (Oct. 21, 1972) (codified as amended at 16 U.S.C. §§ 1361-1407).
[176] *See, e.g.*, Fooke Co. v. Mandel, 386 F. Supp. 1341 (D. Md. 1974).
[177] *See Endangered Species Conservation Act of 1972: Hearings Before the Subcomm. on the Env't of the Senate Comm. on Commerce*, 92nd Cong. 253 (1972).
[178] Prince Bernhard, *Man and the Natural World*, N.Y. TIMES, Mar. 26, 1972, § IV, at 13.
[179] William S. Boyd, Note, *Federal Protection of Endangered Wildlife Species*, 22 STAN. L. REV. 1289 (1970).
[180] NIXON, *supra* note 130, at 183.

provide the kind of management tools needed to act early enough to save a vanishing species."[181] The same day of the President's address, Representative John Dingell (D-MI) introduced endangered species legislation endorsed by the Nixon administration.[182] Ten days later, Senator Mark Hatfield (R-OR) submitted identical legislation to the Senate.[183] Congress, however, failed to pass new endangered species legislation until the following year. The Endangered Species Act of 1973 was a law far more powerful than anticipated at the time.

XI. Conclusion

In many ways, efforts to protect endangered species during the nineteenth and twentieth centuries reflect advancements in scientific understanding from Charles Darwin to Eugene Odum. Yet despite the insights of ecology on the importance of biodiversity, endangered species laws also reflect a bias in favor of "useful" game species or charismatic megafauna representative of the national heritage. This can be seen in efforts to protect individual species like bison and bald eagles, as well as the attempts to protect certain kinds of species like migratory birds and marine mammals. The Endangered Species Preservation Act of 1966 favored these kinds of species, as is evidenced by congressional rhetoric and the specific species FWS actually listed as endangered. The Endangered Species Conservation Act of 1969 also favored these distinctive and appealing species. It protected fur-bearing species like the cheetah and other spotted cats, as well as species like the elephant, rhinoceros, and alligator that produced valuable ivory and skins. Even the Endangered Species Act of 1973 reflects a bias toward charismatic megafauna. Over the last few decades, great controversies have ensued when the ESA is applied to species such as the snail darter and spotted owl at the expense of economic development.

The history of endangered species protection is one of ever-increasing federal power, often at the expense of state authority. In the twentieth century the judiciary has consistently upheld this usurpation based on expansive interpretations of the property clause, the treaty-making power, and the Commerce Clause. Ultimately, the national, and even international, scope of the extinction crisis required national regulation. Thus, science dictated the course and nature of

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[181] *Id.*
[182] H.R. 13081, 92nd Cong. (1972).
[183] S. 3199, 92nd Cong. (1972).

endangered species law. While states today continue to promulgate fish and game laws to regulate hunting within their borders, endangered species protection is now primarily the province of the federal government.[184]

[184] States may, however, pass endangered species laws more powerful and restrictive than the Endangered Species Act.