Butterflies, Cave Spiders, Milk-Vetch, Bunchgrass, Sedges, Lilies, Checker-Mallows and Why the Prohibition Against Judicial Balancing of Harm Under the Endangered Species Act is a Good Idea

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BUTTERFLIES, CAVE SPIDERS, MILK-VETCH, BUNCHGRASS, SEDGES, LILIES, CHECKER-MALLOWS AND WHY THE PROHIBITION AGAINST JUDICIAL BALANCING OF HARM UNDER THE ENDANGERED SPECIES ACT IS A GOOD IDEA

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I. INTRODUCTION

Since 1978, at least, it has been the received wisdom that the Endangered Species Act of 1973 prohibits courts from balancing the value of protected species against the value of the economic activities their protection might displace. Justice Rehnquist’s dissent in *Tennessee Valley Authority v. Hill* defending the “power of the Chancellor to do equity”—the discretion of the district court to allow the destruction of a species for the benefit of the Tellico dam—has never developed any significant following among the lower federal courts.

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1 See *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 187-88 (1978) (“[T]he plain language of the [Endangered Species] Act, buttressed by its legislative history, shows clearly that Congress viewed the value of endangered species as ‘incalculable.’ Quite obviously, it would be difficult for a court to balance the loss of a sum certain—even $100 million—against a congressionally declared ‘incalculable’ value . . . .”).

2 See id. at 212. (Rehnquist, J. dissenting) (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329-30 (1944)).

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3 *Id.* at 212. (Rehnquist, J. dissenting) (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329-30 (1944)).

The essence of equity jurisdiction has been the power of the Chancellor to do equity and to mould each decree to the necessities of the particular case. Flexibility rather than rigidity has distinguished it. The qualities of mercy and practicality have made equity the instrument for nice adjustment and reconciliation between the public interest and private needs as well as between competing private claims. We do not believe that such a major departure from that long tradition as is here proposed should be lightly implied . . . . [I]f Congress desired to make such an abrupt departure from traditional equity practice as is suggested, it would have made its desire plain.

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4 See *Strahan v. Coxe*, 127 F.3d 155, 160 (1st. Cir. 1997) (“Under the ESA, however, the balancing and public interest prongs have been answered by Congress’ determination
Some courts, however, are challenging this orthodoxy. In particular, the United States Supreme Court, after ignoring the substantive provisions of the Endangered Species Act for a decade and a half, is toying with the statute again. In musings characteristic of opinions from that Court, Justices have dropped a few hints that the lower courts should take a more “reasonable” approach to applying the Endangered Species Act.\(^5\) Neither of the Court’s recent cases, Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon\(^6\) nor Bennett v. Spear,\(^7\) contain any holdings likely to shake the lower courts, but they add new fire to a twenty-year old debate.

In this article, I argue that the orthodoxy makes sense. The Endangered Species Act, as currently administered, cannot tolerate judicial balancing of species harm and economic dislocation while still honoring the purpose of the statute—the preservation and recovery of protected species and the ecosystems on which they depend.\(^8\) The inadvisability of a balancing approach to species preservation under the Act is not the function of a value judgment exalting animals over humans.\(^9\) Rather, it is the direct result of the administrative and judicial application of the Act’s listing process.

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\(^7\) 117 S. Ct. 1154 (1997).


The Endangered Species Act tells us that an endangered species is a species "which is in danger of extinction throughout all or a significant portion of its range . . . ."\textsuperscript{10} The agencies charged with making the administrative determinations as to what constitutes an endangered species have interpreted the statutory definition to cover only species dramatically reduced in distribution and numbers and, generally, subject to multiple threats.\textsuperscript{11} Listed endangered species are the true hard luck cases in the process of human transformation of the Earth's environment.\textsuperscript{12}

It is a bad idea to balance the value of most endangered species against the economic cost of their protection because their circumstances are so precarious. Once a species is perched on the brink of extinction, compromise becomes unacceptably dangerous; what may look like "reasonable" accommodation may lead to annihilation.\textsuperscript{13} If we really intend to protect species from extinction, the allowable minimum level of regulatory prohibition and active management is that level necessary to insure a good chance of species survival in the long term (however defined). Because we only list species in dire need of protection and assistance, this "minimum level of protection" generally requires, at least, the level of regulatory prohibition the Endangered Species Act provides.

In this article, I first endeavor to establish the proposition that federal courts, urged by litigants and unsettled by the Supreme Court's delphic pronouncements, are beginning to reassess the twenty year-old prohibition against balancing imposed by \textit{Tennessee Valley Authority v. Hill}. I then provide brief sketches of thirteen recently listed endangered species to illustrate why a balancing approach would be such a bad idea.

II. QUESTIONING THE ORTHODOXY

A. \textit{Tennessee Valley Authority v. Hill: The Orthodoxy}

In 1966, Congress authorized the Tellico Dam Project in the Little


\textsuperscript{11} Factors for Listing, Delisting or Reclassifying Species, 50 C.F.R. § 424.11 (1997).

\textsuperscript{12} The Endangered Species Act tells us that "threatened species" are species "likely to become endangered in the foreseeable future." 16 U.S.C. § 1532(20) (1994). The prognosis for most listed threatened species at the time of listing is not much better that it is for endangered species. This article does not discuss threatened species.

\textsuperscript{13} See Endangered and Threatened Wildlife and Plants, 40 Fed. Reg. 47,505, 47,506 (1975) (discussing the failure of a TVA program to transplant the Snail Darter into another river and why that program fails under the Act.)
Tennessee River Valley. By March 1976, the main dam, spillway and auxiliary dams were 85 percent complete.14 On October 9, 1975, the United States Fish and Wildlife Service (the “USFWS”) listed the snail darter, a “small tannish-colored fish,”15 as an endangered species.16 Closing the Tellico dam and filling the reservoir “would [have] result[ed] in the total destruction of the snail darter’s habitat.”17 Environmental plaintiffs and local residents sued in the United States District Court for the Eastern District of Tennessee. The District Court forthrightly admitted that closing the dam would destroy the known habitat of the species and would thereby violate the Endangered Species Act’s prohibition against actions likely to jeopardize the continued existence of species,18 but it exercised its equitable discretion and refused to issue an injunction preventing completion and closure of the dam.19 The Sixth Circuit reversed,20 and in June 1978, the Supreme Court affirmed and amplified the Sixth Circuit opinion.21

It is hard to overemphasize the significance of the United States Supreme Court’s opinion in Tennessee Valley Authority v. Hill. Not only did it remain the only Supreme Court consideration of the substantive provisions of the Endangered Species Act for seventeen years, it also characterized the Act as placing the goal of “revers[ing] the trend toward species extinction” above considerations of cost,22 and explicitly precluded courts from engaging in traditional equitable balancing in determining whether to issue an injunction in the face of a violation of the Act.23

In the summer of 1978, Congress took another look at the Endangered Species Act in light of the Supreme Court’s opinion.24 While

15 See id. at 755.
17 Id. at 47,506.
19 419 F. Supp. at 763 (“If plaintiffs’ argument were taken to its logical extreme, the Act would require a court to halt impoundment of water behind a fully completed dam if an endangered species were discovered in the river on the day before such impoundment was scheduled to take place. We cannot conceive that Congress intended such a result.”).
22 Id. at 184-85.
23 See id. at 187-88.
24 See Eric Erdheim, The Wake of the Snail Darter: Insuring the Effectiveness of Section
the 1978 amendments to the Act did create a narrow, cumbersome, statutory exemption process, the fundamental Supreme Court holding


25 If a biological opinion issued under the post-1978 section 7 indicates that the action will violate the jeopardy prohibition of section 7 and there are no "reasonable prudent alternatives" which would allow the action to go forward without violating the prohibition, the action agency, any applicant, or the Governor of the State may apply for an exemption. See 16 U.S.C. § 1536(g)(1) (1994). This process was created "to determine whether the economic benefits of a proposed federal action outweigh the benefits of protecting a species." GAO/RCED 92-131, Endangered Species Act: Types and Numbers of Implementing Actions (1992). An application must be filed no later than 90 days after the completion of the consultation process. See id. § 1536(g)(2)(A). The exemption application's final determination is made by the Endangered Species Committee (the "Committee"), id., sometimes called the "God Committee" or "God Squad" because of its godlike power to relegate an entire species to oblivion. The Committee's only job is to consider exemption applications. See id. § 1536(e). The Committee is made up of the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Council of Economic Advisors, the Administrator of the Environmental Protection Agency, the Secretary of the Interior, the Administrator of the National Oceanic and Atmospheric Administration, and one individual from each affected state chosen by the Secretary of the Interior and appointed by the President. See id. § 1536(e)(3).

If the Secretary of the Interior determines that an exemption application meets procedural requirements, the Secretary must submit a report to the Committee. See id. § 1536(g)(5). The report must discuss the following:

(A) the availability of reasonable and prudent alternatives to the agency action, and the nature and extent of the benefits of the agency action and of alternative courses of action consistent with conserving the species or the critical habitat;

(B) a summary of the evidence concerning whether or not the agency action is in the public interest and is of national or regional significance;

(C) appropriate reasonable mitigation and enhancement measures which should be considered by the Committee; and

(D) whether the Federal [action] agency concerned and the exemption applicant refrained from making any [prohibited] irreversible or irretrievable commitment of resources ....

Id.

After receiving the report, the Committee has 30 days to determine whether or not to grant an exemption. See id. § 1536(h)(1). In order for the Committee to grant an exemption, five or more of the Committee members voting in person must determine, based on the Secretary's report and record of the hearing, that:

(i) there are no reasonable and prudent alternatives to the agency action;

(ii) the benefits of such action clearly outweigh the benefits of alternative courses of action consistent with conserving the species or
remained unchanged. Outside a few specific statutorily sanctioned processes, balancing remained forbidden.26

The Supreme Court decided *Tennessee Valley Authority v. Hill* under section 7 of the Endangered Species Act, which requires federal agencies to ensure that their actions do not jeopardize the continued existence of protected species or their designated critical habitat.27 Lower courts extended the Court’s prohibition against balancing to the Act’s other primary prohibitive provision—Section 9.28 Section 9 prohibits any “person” from “taking” any member of an endangered species of wildlife.29 The definition of “take” includes the actions: “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”30 In 1986, Judge Samuel King, ordered the Hawaii Department of Land and Natural Resources to remove a herd of Mouflon sheep from the habitat of the endangered Palila, a native Hawaiian bird, on the slopes of Mauna Kea on the Island of Hawaii.31 The Department argued that the court’s ruling ran counter to its “multiple use” mandate, to

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26 The Endangered Species Act requires the designation of critical habitat for listed species. *Id.* § 1533(b)(2). In contrast to the listing process, the Act expressly requires consideration of economic impact in designation of critical habitat. *Id.* The Secretary of the Interior “may exclude any area from critical habitat if . . . the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless . . . the failure to designate such area as critical habitat will result in the extinction of the species concerned.” *Id.*

27 *Id.* § 1536(a)(2).


30 *Id.* § 1532(19). By its terms, the section 9 prohibition against takings applies only to endangered species of fish and wildlife. However, USFWS regulations extend the prohibition to threatened species of wildlife. *See* Endangered and Threatened Wildlife and Plants, 50 C.F.R. §§ 17.21(c), 17.31(a) (1997).

protect endangered species and encourage sport hunting. The court disagreed and extended the prohibition against balancing: "[T]he Endangered Species Act does not allow a 'balancing' approach for multiple use considerations. I have found that mouflon sheep are 'harming' the Palila population .... Once this significant negative impact has been shown, the Act leaves no room for mixed use or other management strategies or policies."

The significance of the prohibition against balancing took ten years to surface. In 1988, we entered the age of sweeping Endangered Species Act injunctions: closing down the national forests in Texas to protect the Red-Cockaded Woodpecker, closing down the national forests in Washington, Oregon, and Northern California to protect the Northern Spotted Owl, closing down national forests in Idaho to protect endangered salmon runs, and closing down the national forests in Arizona and New Mexico to protect the Mexican Spotted Owl.

B. Babbitt v. Sweet Home: Hints

In the mid-1990's, fully aware of this dramatic history of broad injunctions, the Supreme Court chose two Endangered Species Act cases for review. The cases it chose had almost nothing to do with balancing the value of species protection against its economic cost.

First came Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon. As noted above, Section 9 of the Endangered Species

32 See id. at 1080.
33 Id. at 1081 (citations omitted).
35 See Portland Audubon Soc'y v. Babbitt, 998 F.2d 705 (9th Cir. 1993) (affirming standing, possibility of injunction, and order of supplementary environmental impact statements for environmental groups suing to protect northern spotted owl habitat).
Act prohibits any person from “taking” any member of a protected species of wildlife. To “take” a species is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” The USFWS, through regulations, defines “harass” as an “act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns,” and it defines “harm” as an “act which actually kills or injures wildlife [and which] may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding, feeding or sheltering.” The definitions of the terms “harm” and “harass” extend the taking prohibition to both protected species members and their essential habitat.

In 1994, the District of Columbia Circuit Court invalidated USFWS regulations including habitat modification within the definition of take. In 1995, in Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon, the United States Supreme Court reversed the District of Columbia Circuit and upheld the authority of USFWS to promulgate regulations including “habitat takings” within the regulatory definition of “harm” within the statutory definition of “take.”

Neither the facts of Sweet Home, a facial challenge to an agency regulation, nor Justice Stevens’ majority opinion, grounded in deference to the agencies power to interpret its statutory mandate, had anything to do

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40 A person includes:

[A]n individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States.


41 16 U.S.C. § 1532(19). By its terms, the section 9 prohibition against takings applies only to endangered species of fish and wildlife. However, USFWS regulations extend the prohibition to threatened species of wildlife. See 50 C.F.R. §§ 17.21(c), 17.31(a) (1997).

42 50 C.F.R. § 17.3. Normal behavior patterns include, but are not limited to, “breeding, feeding and sheltering.” Id.

43 Id.


with the balancing issue. However, some language in the decision suggested a softening in the Court’s position in *Tennessee Valley Authority v. Hill.*

The first hint came in the last full paragraph of the majority opinion. After summing up the resounding victory for agency discretion, Justice Stevens noted:

In the elaboration and enforcement of the ESA, the Secretary and all persons who must comply with the law will confront difficult questions of proximity and degree; for, as all recognize, the Act encompasses a vast range of economic and social enterprises and endeavors. *These questions must be addressed in the usual course of the law, through case-by-case resolution and adjudication.*

What could this mean? Does the “usual course of the law” include prohibitions against the exercise of equitable powers? How could the Endangered Species Act of *Tennessee Valley Authority v. Hill,* placing species preservation above all considerations of costs, be reconciled with “elaboration and enforcement” embracing “economic and social enterprises and endeavors” or a “case-by-case” basis? Arguably this language applies exclusively to agency actions, but the references to “law,” “cases” and “adjudication,” suggest a judicial component.

The more significant hints appear in Justice O’Connor’s concurrence, in which she joined the Court’s opinion on the understanding that the application of the Section 9 “taking” prohibition be “limited by ordinary principles of proximate causation, which introduce notions of foreseeability.” Foreseeability turned out not to be the only component in O’Connor’s proximate cause:

Proximate causation is not a concept susceptible of precise definition. It is easy enough, of course, to identify the extremes. The farmer whose fertilizer is lifted by tornado from tilled fields and deposited miles away in a wildlife refuge cannot, by any stretch of the term, be considered the proximate cause of death or injury to protected species

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47 515 U.S. at 708 (emphasis added).
48 *Id.* at 709.
occasioned thereby. At the same time, the landowner who drains a pond on his property, killing endangered fish in the process, would likely satisfy any formulation of the principle. We have recently said that proximate causation “normally eliminates the bizarre” . . . Proximate causation depends to a great extent on considerations of the fairness of imposing liability for remote consequences. The task of determining whether proximate causation exists in the limitless fact patterns sure to arise is best left to lower courts.  

Few environmentalists would be likely to quibble with the tornadoed farmer. But what does “fairness” mean in this context? Is it fair to prohibit a timber sale, when a salmon must scale a dozen dams to spawn in the waters the timber sale might affect? How is the lower court to use the concept of proximate cause to work fairness in the absence of the power to balance the value to the species against the harm its protection would cause?

C. Bennett v. Spear: More Hints

In Sweet Home, Justice Scalia dissented from the majority opinion noting that the majority holding “imposes unfairness to the point of financial ruin—not just upon the rich, but upon the simplest farmer who finds his land conscripted to national zoological use.” Two years later, he authored the unanimous opinion of the Court in Bennett v. Spear.

The issues in Bennett revolved around whether plaintiffs, who used irrigation water from the Bureau of Reclamation’s Klamath Irrigation Project and whose interests in that water were primarily economic, could sue the United States Fish and Wildlife Service to challenge the agency’s determination to maintain certain reservoir levels to protect two varieties

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49 Id. at 713 (emphasis added) (citations omitted).
51 515 U.S. at 714.
of endangered fish. The district court and Ninth Circuit determined plaintiffs lacked standing to seek judicial review under the citizen suit provision of the Act. The district court decided the case on a motion to dismiss. No remedy, therefore, had been issued, nor had any balancing been done. The case did, however, offer the Supreme Court another chance to ponder the relationship between the Endangered Species Act and economic interests.

Justice Scalia first attacked the Ninth Circuit's assertion that Plaintiffs economic claims did not fall within the "zone of interest" of the Endangered Species Act. The "zone of interest" inquiry is a "prudential standing requirement" which the court articulates as "whether the interest sought to be protected by the complainant is arguably within the zone of interests to be protected or regulated by the statute or constitutional guarantee in question." The Ninth Circuit had determined that the purely environmental purpose of the Endangered Species Act—the preservation of protected species and the ecosystems on which they depend—did not describe a "zone of interest" that included economic claims. The Supreme Court found otherwise.

Justice Scalia's language suggests economic considerations permeate the structure of the Endangered Species Act. Plaintiffs asserted that the USFWS failed to meet its obligations under section 7 of the Endangered Species Act by failing to "use the best scientific and commercial data available." Concerning the purpose of that requirement, Justice Scalia opined:

The obvious purpose of the requirement that each agency "use the best scientific and commercial data available" is to ensure that the ESA not be implemented haphazardly, on the basis of speculation or surmise. While this no doubt serves to advance the ESA's overall goal of species preservation, we think it readily apparent that another objective (if not indeed the primary one) is to avoid

53 See id. at 1157.
54 See id. at 1160.
55 See id. at 1161.
56 Id. (quoting Association of Data Processing Serv. Org., Inc. v. Camp, 397 U.S. 150, 153 (1970)).
Justice Scalia then immediately asserts that this concern: avoiding "needless economic dislocation" caused by zealous but "unintelligent" federal officials is one of the cornerstones of the Act:

That economic consequences are an explicit concern of the Act is evidenced by § 1536(h), which provides exemption from § 1536(a)(2)'s no-jeopardy mandate where there are no reasonable and prudent alternatives to the agency action and the benefits of the agency action clearly outweigh the benefits of any alternatives. *We believe the "best scientific and commercial data" provision is similarly intended, at least in part, to prevent uneconomic (because erroneous) jeopardy determinations.* Petitioners’ claim that they are victims of such a mistake is plainly within the zone of interests that the provision protects.60

At one level, who would object? No one, environmentalists least of all, wants zealous but unintelligent federal officials stopping economically valuable activities if stopping them will not further the goal of species preservation. But there is something else going on here. Why does it follow that an error in an agency determination under the Endangered Species Act can render that determination "uneconomic"? Why is there any relationship at all between error in terms of the goal of species preservation and short term economics? Is Justice Scalia positing a constant and consequential economic value for species preservation which justifies "correct" agency determinations when they impose economic hardship to protect species (a nice but naive thought), or is he suggesting that the purpose of the Act is to balance disputes between species and economic interests and that an "erroneous" determination is one that fails to strike such a balance?

The language in *Bennett v. Spear* is easier to reconcile with *Tennessee Valley Authority v. Hill* than is the language in *Sweet Home*. The "zone of interest" test only requires that Congress's wish be to protect

59 *Id.*
60 *Id.* (emphasis added).
the interests asserted by plaintiffs (economic interests) when it drafted the statute, and it does not directly contradict the idea that the statute placed another interest (the preservation of species) above considerations of cost and outside the reach of judicial balancing. On the other hand, it is hard to imagine why a legislative body would have drafted a statute solicitous of economic interests while directing the courts to ignore economic interests in fashioning relief. While not directly questioning Hill, Scalia creates a small paradox which, like the grain of sand inserted into an oyster, may grow, like a pearl, into a contradiction requiring resolution. In the meantime, his language fuels the balancing debate.

D. Lower Court Roots 1991-1995

I do not want to give the Supreme Court too much credit for precipitating the reconsideration of the prohibition against balancing in *Tennessee Valley Authority v. Hill*. At the same time that some lower federal courts were issuing the broad ESA injunctions of the late 1980's and early 1990's, others were already flirting with the idea of balancing.

On September 27, 1991, the United States District Court for the District of Columbia preliminarily enjoined the Montana Grizzly Bear Hunt, scheduled to begin on October 1, 1991. In an unreported opinion, *Fund for Animals v. Turner*, the court determined that the USFWS had failed to provide an adequate basis for its regulation allowing sport hunting of a threatened species. Although the court did finally issue an

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61 See *id.* at 1160.
63 It appears unlikely that the explanations offered by FWS provide a rational basis for concluding that population pressures in the sense intended by Congress existed in the [Northern Continental Divide Ecosystem] as of 1986. The Court has made an additional, preliminary effort to examine the administrative record on its own to see whether there was nevertheless sufficient evidence in that record to support a finding of population pressures. This effort, however, has not been fruitful; in fact, material in the administrative record may corroborate the conclusion that no rational finding of population pressures could be made in 1986. For example, the FWS's 1982 recovery plan for the grizzly bear states that there is no evidence to indicate that numbers of grizzly bears in the [NCDE] are increasing. When the added stress of increasing habitat encroachment by increasing numbers of people is considered, the trend may be a decreasing population and the need for action is obvious.
injunction, in doing so, it began to recast and narrow the prohibition against balancing:

The Court does not believe that [Tennessee Valley Authority v. Hill] compels the Court to issue an injunction in this case upon a finding of likelihood of success. In TVA, it was stipulated that completion of the construction project at issue—the Tellico Dam on the Little Tennessee River—would result in the complete elimination of an endangered species. . . . In this case, by contrast, there is not the remotest possibility that the limited hunting of the grizzly bear during the period in which a preliminary injunction would be in place will eradicate the species. . . . Accordingly, the Court does not believe that the Supreme Court’s decision in TVA compels the issuance of an injunction. . . .

Having distinguished Tennessee Valley Authority v. Hill, the court endeavored to achieve an accommodation with the spirit of the Hill holding:

Nevertheless, TVA does underscore the weight Congress has placed on the protection of endangered and threatened species. . . . [T]he Court is sensitive to the harms articulated by defendants that may result from the issuance of a preliminary injunction. The success of the grizzly bear conservation program depends upon the continued support of the people of the State of Montana . . . who must have confidence that they have the flexibility to deal with the difficult problems that arise in managing the bear population. This confidence, it is said, would be undermined by an eleventh-hour injunction upsetting a federal-state program that has been in place for a number of years.

Is the court balancing or not? It limits the holding in Hill to

Id. at *5 (second alteration in original) (footnote omitted).
64 Id. at *8.
65 Id.
species-wide threats, a conclusion difficult to draw from the language of that opinion and at odds with analysis extending the balancing prohibition to takings of individual species members. But, then, having freed itself from that prohibition, it presents its analysis as reconciling two essential elements of bear conservation—_bears_, alive in the wild and _goodwill toward bears_, generated by shooting bears in the wild; any economic hardship associated with discontinuing the bear hunt three days before it was scheduled to begin goes undiscussed.

In May 1994, in _National Wildlife Federation v. Burlington Northern Railroad_, the Ninth Circuit upheld the denial of an injunction in an ESA case while admitting that a prohibited taking had occurred. In the winter of 1988-89, three Burlington Northern Railroad trains carrying grain derailed on a four-mile stretch of track in northwestern Montana. Nearly 10,000 tons of corn spilled over an area of steep rocky terrain. The corn spill attracted grizzlies to the site to feed. By October 1990, seven grizzly bears in northwestern Montana had fatal encounters with Burlington Northern trains. At least five of these bears were killed in the immediate vicinity of the corn spills. The National Wildlife Federation sued demanding protection for the bears. The Montana district denied the National Wildlife Federation’s motion for preliminary injunction. The court applied a traditional injunctive balancing test and denied the motion on the ground that plaintiffs had failed to prove that prohibited “takings” were likely to happen again and because “the fact the [Burlington Northern]’s trains killed grizzly bears does not, in and of itself, establish irreparable injury.” The Ninth Circuit affirmed. The circuit court disapproved the district court’s use of the traditional injunctive balancing test: “In cases involving the ESA, Congress removed from the courts their traditional equitable discretion in injunction proceedings of balancing the parties’ competing interests. . . .” Then the court offered its own

66 See id.
67 23 F.3d 1508, 1509 (9th Cir. 1994).
68 See id. at 1510.
69 See id.
70 See id.
71 See id.
72 See id.
74 Id.
75 23 F.3d at 1511.
Nevertheless, these cases do not stand for the proposition that courts no longer must look at the likelihood of future harm before deciding whether to grant an injunction under the ESA. **Federal courts are not obligated to grant an injunction for every violation of the law.** The plaintiff must make a showing that a violation of the ESA is at least likely in the future.\textsuperscript{76}

This is not balancing. But does it limit the prohibition against balancing by granting courts back some of their traditional rights? The issue of future harm is really one of "likelihood:" more about the extent of the risk to bears than about its existence. After all, the risk from trains had been demonstrated, as had the presence of bears in the area.\textsuperscript{77} The likelihood of future harm is often a significant element in the balancing of harms in traditional injunction analysis.\textsuperscript{78}


Since the Supreme Court began dropping hints fueling the balancing debate, lower federal courts have taken a wary stance, applying the established law, but preparing to protect their rulings if the standard changes. In *Loggerhead Turtle v. County Council of Volusia County Council*, plaintiffs sued a Florida County claiming that county's beach-related ordinances regarding lighting and vehicular access posed a danger to endangered turtles.\textsuperscript{79} The County allowed some vehicles on the beach during turtle nesting season.\textsuperscript{80} Lighting demonstrably disoriented both mother turtles and their young, and tire ruts prevented young turtles from reaching the sea.\textsuperscript{81} Plaintiffs argued and the court agreed that driving and lighting constituted a "taking" of endangered turtles in violation of Section 9.\textsuperscript{82}

\textsuperscript{76} Id. (emphasis added) (citing Tennessee Valley Auth. v. Hill, 437 U.S. 153, 193 (1978)).
\textsuperscript{77} See id. at 1510.
\textsuperscript{78} See id. at 1511.
\textsuperscript{79} 896 F. Supp. 1170, 1172 (M.D. Fla. 1995).
\textsuperscript{80} See id. at 1174.
\textsuperscript{81} See id. at 1174-75, 1180-82.
\textsuperscript{82} See id. at 1180-82.
In arguing against plaintiffs' motion for a preliminary injunction, the County asserted that *Sweet Home* had changed the law, giving it a chance to argue that the value of lighting and driving on the beach outweighed the harm done to the turtles.\(^3\) The court disagreed:

Volusia County points to language at the end of the Supreme Court's recent decision in *Babbitt v. Sweet Home Chapter of Communities for a Greater Oregon* as an indication that the Supreme Court has softened its stand on the strictness with which courts must construe their obligations under the Endangered Species Act. . . . The Court agrees with the County in a limited sense. Under the Endangered Species Act, concepts such as "harm" and "harass" [within the definition of "take"] are subject to differing and complex analyses. An analysis of the concept of "significant habitat modification," for example, must take account of various fact-specific circumstances which can only be assessed within the context of the case itself. As for a balancing of affected "economic and social enterprises," the language of the Act clearly leaves this job to the Secretary of the Interior and U.S. Fish and Wildlife Service. . . . If Congress had wanted the federal courts to undertake a similar balancing of interests, it could have enacted such legislation.\(^4\)

The court's opinion is a victory for the orthodoxy; balancing the equities is still out of the question. To make this point, the ruling does some violence to the *Sweet Home* language. The court's categorical rejection of balancing implies that the "case-by-case resolution and adjudication" in "the usual course of the law" invoked by the Supreme Court in *Sweet Home* has nothing to do with courts.\(^5\)

On the other hand, the *Loggerhead* court's language recognizing the "various fact-specific circumstances" to be considered in applying the elements of the taking prohibition, leaves some room for balancing arguments and sidesteps the questions of fairness and foreseeability raised.

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\(^3\) See *id.* at 1179.

\(^4\) *Id.* (citations omitted).

\(^5\) See *supra*, note 47 and accompanying text.
by Justice O'Connor in her *Sweet Home* concurrence.\footnote{See 896 F. Supp. at 1179.}

More recently, in *Strahan v. Coxe*,\footnote{127 F.3d 155 (1st Cir. 1997), cert. denied, 119 S. Ct. 81 (1998).} the First Circuit sidestepped an argument based on Justice O'Connor's proximate cause concurrence.\footnote{Id. at 163-64.} Richard Strahan, an officer of GreenWorld, Inc.,\footnote{See id. at 158.} filed suit claiming Massachusetts state officers were violating the Endangered Species Act by licensing gillnet and lobster pot fishing in coastal waters.\footnote{See id.} Evidence indicated that endangered Northern Right Whales had become entangled in fishing gear and that these entanglements might have resulted in the death of a number of the species.\footnote{Id. at 158.} The deaths were significant loss because only about 300 Northern Right whales still exist on the planet.\footnote{Id. at 159.}

The district court ordered the Massachusetts officials to take steps to reduce the risk to the protected whales and apply for an incidental taking permit under the Endangered Species Act.\footnote{Id. at 158.} Massachusetts appealed. They argued, among other things, that their licensing activities did not "proximately cause" injury to the protected whales.\footnote{Id.} The court disagreed:

\footnote{See 896 F. Supp. at 1179.}
The defendants argue that the statute was not intended to prohibit state licensure activity because such activity cannot be a "proximate cause" of the taking. The defendants direct our attention to long-standing principles of common law tort in arguing that the district court improperly found that its regulatory scheme "indirectly causes" these takings. Specifically, the defendants contend that to construe the proper meaning of "cause" under the ESA, this court should look to common law principles of causation and further contend that proximate cause is lacking here. The defendants are correct that when interpreting a term in a statute which is, like "cause" here, well-known to the common law, the court is to presume that Congress intended the meaning to be interpreted as in the common law. We do not believe, however, that an interpretation of "cause" that includes the "indirect causation" of a taking by the Commonwealth through its licensing scheme falls without the normal boundaries.

In this instance, the state has licensed commercial fishing operations to use gillnets and lobster pots in specifically the manner that is likely to result in a violation of federal law. The causation here, while indirect, is not so removed that it extends outside the realm of causation as it is understood in the common law.95

The circuit court never discusses Justice O'Connor's concurrence, the meaning of proximate cause in the protected species context or, even whether proximate cause should be applied in the protected species context.

Even more recently, in House v. United States Forest Service, the United States District Court for the Eastern District of Kentucky relegated a United States Forest Service balancing argument to a footnote.96 The Forest Service asserted that it could balance the apparent virtues of an extensive timber sale on the Daniel Boone National Forest97 against

95 Id. at 163-64 (citation omitted).
97 "[T]he Leatherwood Project consists of seven separate cutting units that will harvest
protection of the endangered Indiana bat. In footnote eight, the court observed:

While the Court agrees that defendants have some discretionary powers as to the methods of conservation it desires to implement, it does not agree with defendants’ assertion that defendants may balance competing agency interests with the conservation of an endangered species, as this flies smack in the face of the Supreme Court’s holding in *Tennessee Valley Authority v. Hill*.

Most recently, in *Bensman v. United States Forest Service*, the United States District Court for the western district of Missouri took a strong position supporting the traditional prohibition against balancing, but considered a balancing standard to strengthen its ruling. *Bensman* involved a United States Forest Service salvage sale in the summer habitat of the same endangered Indiana Bat. The bat had suffered a population decline of eighty-two percent in Missouri since 1983. On October 17, 1997, the court held a hearing on the plaintiffs’ motion for preliminary injunction. The Forest Service argued that, despite the fact that the proposed salvage timber sale would likely result in a taking of the endangered bat, the court should balance the welfare of the bat against the virtues of yet another timber sale: reducing forest fire fuel accumulation, facilitating new tree growth, removing the hazards to the safety of the public, and providing “naturally harvested” trees to meet the public demand for wood products. The court disagreed:

Defendants maintained at the preliminary injunction hearing that the Court must apply a traditional balancing

commercial saw timber and firewood on approximately 199 acres. The project also entails the construction and/or reconstruction of approximately 2.6 miles of logging roads.” *Id.* at 1025 (citation omitted).

98 The bat is legally famous as the victim in one of the earliest Endangered Species Act cases. See *Sierra Club v. Froehlke*, 534 F.2d 1289 (8th Cir. 1976).

99 974 F. Supp. at 1027 n.8 (citation omitted).

100 984 F. Supp. 1242, 1247 (W.D. Mo. 1997).

101 *See id.* 1245.

102 *See id.*

103 *See id.* at 1244.

104 *See id.* at 1247.
test to determine if the Forest Service acted arbitrarily or capriciously, weighing the harm the agency action would impose on the Indiana bats against the other competing interests of the Forest Service. The Supreme Court has stated, however, in unequivocal terms:

The plain intent of Congress in enacting [the ESA] was to halt and reverse the trend toward species extinction, whatever the cost. . . . [T]he legislative history undergirding § 7 reveals an explicit congressional decision to require agencies to afford first priority to the declared national policy of saving endangered species. The pointed omission of the type of qualifying language previously included in endangered species legislation reveals a conscious decision by Congress to give endangered species priority over the "primary missions" of federal agencies . . .

[T]he Court concludes that the Forest Service is bound by the ESA . . . to place the Indiana bat at the top of their priority list.105

But the court did not stop there. Aware that the principle it enunciated so clearly was in some doubt, it went on to apply a balancing test to buttress its injunction:

Even applying a balancing test to these factors, the Court finds that protection of the Indiana bat's habitat far outweighs the factors endorsed by the Forest Service. The salvage operation will remove only logs. All of the small limbs will be cut and left lying on the ground "not over 30 inches" tall. The Court can imagine no better fire source than dead tree limbs stacked 30 inches tall on the forest floor. Further, the likelihood of a tree falling on an errant hiker is far more remote than the harm posed to the Indiana bat by removal of possible roost trees. Viewed against the

105 Id. at 1247 (first and second alteration in original) (quoting Tennessee Valley Auth. v. Hill, 437 U.S. 153, 185, 187 (1978)).
The frequency of cases addressing balancing arguments under the Endangered Species Act and the limited, cryptic, and double-footed rulings of lower federal courts in response to those arguments demonstrates that the Supreme Court hints about balancing have had an effect on litigants and, to a lesser degree, judges.

III. THIRTEEN SPECIES ON THE BRINK

The issue is on the table: should the federal courts do away with the prohibition against balancing species protection against the economic dislocation it may cause? Which Supreme Court should we heed? The one that decided, and still cites Tennessee Valley Authority v. Hill with approval, or the one that hints that judges should weigh the value of species protection against the economic dislocation it causes? The answer I offer is practical. It is the only answer that does not frustrate the goals of the Endangered Species Act. Federal courts should defend the orthodoxy annunciated in Tennessee Valley Authority v. Hill. To do otherwise would likely result in the eventual extinction of a significant number of the species Congress intended the Act to protect.

To illustrate, between October 22 and December 5, 1997, the USFWS made the final decision to list fifteen new species as endangered. This Article will discuss thirteen of those species. The

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106 Id.
109 The author neglects the Suisan Thistle and Soft Birdis Beak, for which listing notices were published on November 20, 1997, 62 Fed. Reg. 61,916 (1997) for fear of
sample size and timing were dictated not by any scientific methodology, but rather by the publication deadlines for this symposium and the author's fear of losing his readers' interest. Nonetheless, it is a fairly representative sample. None of the listed species is glamorous, and none is a mammal. The species are plants and arthropods. Such humble species represent much of the work of the Endangered Species Act, with good reason. It is species like these that form the bulk of the biological fabric of the planet. Without exception, these thirteen species have been dramatically reduced in population and distribution. Without exception they are subject to a variety of threats, any one of which might drive them to extinction. At the time of listing, each was balancing on the brink of oblivion.

A. Butterflies and Cave Dwellers

1. Callippe silverspot butterfly (Speyeria callippe callippe) and Behren’s silverspot butterfly (Speyeria zerene behrensii)

In December 1997, the United States Fish and Wildlife Service added two species of California butterfly to the list of endangered species, the callippe silverspot butterfly (Speyeria callippe callippe) and Behren’s silverspot butterfly (Speyeria zerene behrensii). These two species exist only along the coast of northern California. Each depends on a particular flower species for propagation and larval food: for the callippe

overwhelming the reader with California coastal plans.

110 See infra Part III.A-B.


112 See infra Part III.A-B.

113 See infra Part III.A-B.

114 See infra Part III.A-B.


116 See id. at 64,306-07.
silverspot the Johnny jump-up (*Viola pedunculata*);\textsuperscript{117} for the Behren's silverspot, another violet, *Viola adunca*.\textsuperscript{118} The callippe silverspot exhibits "hilltopping behavior," adult males and females seek the summit of a hill to mate.\textsuperscript{119}

The callippe silverspot butterfly is known from fourteen historic populations in the San Francisco Bay region and may have existed in many more.\textsuperscript{120} The historic range of the callippe silverspot butterfly included the inner Coast Ranges on the eastern shore of San Francisco Bay and, on the west side of the Bay, from San Francisco south to the vicinity of La Honda in San Mateo County.\textsuperscript{121} In 1997, only two populations of the species remained, one on private land on San Bruno Mountain in San Mateo County, and the other in a city park in Alameda County.\textsuperscript{122} The range of Behren's silverspot butterfly once extended from the mouth of the Russian River in Sonoma County northward along the coast to southern Mendocino County.\textsuperscript{123} At least six historic populations existed.\textsuperscript{124} Now, the single extant population survives on private land near Point Arena in Mendocino County.\textsuperscript{125}

Of the two remaining populations of the Callippe Silverspot, the one in the Alameda County city park is small and threatened with extirpation by human use of the area,\textsuperscript{126} and the San Bruno Mountain population is protected by the famous San Bruno Mountain Habitat Conservation Plan, established in the early 1980's to protect another species of butterfly.\textsuperscript{127} However, lepidopterists threatened the species with

\textsuperscript{117} See id. at 64,307.
\textsuperscript{118} See id.
\textsuperscript{119} See id.
\textsuperscript{120} See id.
\textsuperscript{121} See id.
\textsuperscript{122} See id.
\textsuperscript{123} See id.
\textsuperscript{124} See id.
\textsuperscript{125} See id. at 64,308.
\textsuperscript{126} See id. at 64,312-19.
\textsuperscript{127} In the late 1970s, San Bruno Mountain, directly south of San Francisco in San Mateo County, included about 3,400 acres of undeveloped land. See Steven White, Note, Where Have All the Butterflies Gone? Ninth Circuit Upholds Decision to Allow Incidental Taking, 16 GOLDEN GATE U. L. REV. 93, 93-4 (1986). Vistacion Associates had purchased the land for residential and commercial development. See id. at 94. In 1980, Vistacion and San Mateo County settled on a plan under which about 2,000 of the 3,400 acres would be set aside for parkland and the rest opened for development. See id. After the 1980 deal, the USFWS discovered that the endangered Mission Blue Butterfly
over-collection. Cattle graze on the site of the one remaining population of the Behren's silverspot butterfly.

2. **Kauai cave wolf spider (Adelocosa anops) and the Kauai cave amphipod (Spelaeorchestia koloana)**

and two other proposed endangered species inhabited the open land. See id. at 94-95. In 1981 after an extensive biological study, representatives of the County, Vistacion, local municipalities, USFWS, the California Department of Fish and Game, and the Committee to Save San Bruno Mountain began negotiations to put together a habitat conservation plan to protect the endangered species while allowing development. See id. at 95. In November 1982, USFWS received a formal request for a 10(a) permit for the San Bruno development. See id. at 95-96. On March 4, 1983, USFWS granted the permit application. See Issuance of Permit for Incidental Take of Endangered Species, 48 Fed. Reg. 10,136 (1983). The San Bruno plan permitted the destruction of about fourteen percent of the habitat of the endangered Mission Blue Butterfly, creating an estimated two to five percent increase in the likelihood of the butterfly's extinction. See Richard E. Webster, Comment, *Habitat Conservation Plans Under the Endangered Species Act*, 24 SAN DIEGO L. REV. 243, 249-50 (1987).

In November 1983, Friends of Endangered Species, Inc. challenged the San Bruno conservation plan incidental take permit in court on the grounds that it violated section 10(a) and section 7 by jeopardizing the continued existence of the Mission Blue Butterfly, one of the species for which it authorized takings. See Friends of Endangered Species v. Jantzen, 596 F. Supp. 518, 519 (N.D. Cal. 1984), aff'd, 760 F.2d 976 (9th Cir. 1985). On January 7, 1984, the United States District Court for the Northern District of California denied Friends of Endangered Species' motion for preliminary injunction and rejected its ESA claims. See id. at 520. The district court noted that Congress, in its 1982 amendments to the Act, had used the San Bruno plan as an exemplar of possible section 10(a) conservation plans. See id. at 522. The court also observed that the plan had been reviewed and endorsed by a variety of independent experts. See id. at 523.

On May 14, 1985, the Ninth Circuit affirmed the district court decision. See Friends of Endangered Species v. Jantzen, 760 F.2d 976 (9th Cir. 1985). The court emphasized: (1) that Congress had considered the San Bruno plan as a "paradigm" for section 10(a) conservation plans; (2) that USFWS had determined that the plan would enhance the habitat of the Mission Blue Butterfly; (3) that USFWS had considered expert opinion and public comment before issuing the incidental take permit; and (4) that the permit was subject to revocation or reconsideration if significant new information emerged from the monitoring required under the plan. See id. at 982-83. The court found that the plan's proposed mitigation measures reasonably met the requirements of section 10(a). See id. at 982-85. The court noted that the plan permanently protected 86% of the Mission Blue Butterfly habitat and provided for habitat enhancement. See id. at 984.


129 Id.
On the same day, the United States Fish and Wildlife Service listed two Hawaiian cave dwellers, the Kauai cave wolf spider (*Adelocosa anops*) and the Kauai cave amphipod (*Spelaeorchestia koloana*). The spider hunts and eats the amphipod. Because the habitat needs of the two species and the dangers they face are quite similar, this Article will discuss only the (slightly more glamorous) cave spider.

In the formation of the Hawaiian islands, lava flows created caves, cracks, and smaller, interconnected subterranean spaces. Unique subterranean faunas have long been known from temperate continental cave systems, however, it was not until the 1970's that specialized cave inhabiting animals were known on tropical islands. Since then, fifty species of cave-adapted animals, including the Kauai cave wolf spider, have been discovered in Hawaiian caves. The Kauai cave wolf spider is a member of the wolf spider family. The most conspicuously diagnostic character of the Kauai cave spider is its complete lack of eyes. Despite its blindness, the Kauai cave wolf spider is a predator; it detects the presence of potential food items and actively stalks its prey.

The spider lives only in a four square mile coastal section of lava flows. The flows contain fissures and lava tubes that have not been filled with sediment. Even in this area, the Kauai cave wolf spider has been found only in two lava tube systems. Surface modifications in the area above effect this subterranean habitat. Originally, the above ground habitat of this area was probably a coastal dry scrubland dominated by native plants known to produce extensive root systems that may have

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131 See *id.* at 64,341.
132 See *id.* at 64,340.
133 See *id.*
134 See *id.* at 64,340-41.
135 See *id.* at 64,341.
136 See *id.*
137 See *id.*
138 See *id.*
139 See *id.*
140 See *id.*
141 See *id.* at 64,342.
formed the primary nutrient source for the cave ecosystem. After 1935, much of the area above the spider caves was used for intensive sugar cultivation. In recent years, the land has been subject to urban development related to tourism. Today, "urban" and "urban residential" uses cover approximately seventy-five percent of the original habitat available for the cave spider. The human population of the surrounding Koloa area is expected to double by the year 2015. Interior lands supporting the two known remaining populations of the spider have been rezoned from agriculture to urban usage. Construction of roads, residences, and golf courses degrades the remaining subterranean habitat by removing perennial vegetation and collapsing lava tubes, and causing siltation from grading and filling activities. One of the two populations of the Kauai cave wolf spider is also directly threatened by a proposed bypass road.

In addition, several alien spiders including the brown violin spider (*Loxosceles rufescens*), *Dysdera crocata*, and the spitting spider (*Scytodes longipes*) have invaded the cave habitats and prey on immature stages of the Kauai cave wolf spider.

Golf courses and residential development also results in extensive use of pesticides, particularly insecticides. The cave spider is particularly susceptible to pesticides because of its tendency to seek water sources. Pesticides that leach into adjacent subterranean caverns with water from runoff or irrigation may attract spiders.

B. Nine Endangered Plants

In October 1997, the United States Fish and Wildlife Service published a rule adding nine plant species to the list of endangered

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142 See id.
143 See id.
144 See id.
145 See id.
146 See id.
147 See id. at 64,343.
148 See id.
149 See id. at 64,343.
150 See id.
151 See id.
152 See id. at 64,344.
species. All nine species exist in northern California in areas subject to significant ongoing development pressure and population growth.

1. The Clara Hunt’s milk-vetch (Astragalus clarianus)

The Clara Hunt’s milk-vetch is a low growing annual herb in the pea family. It grows only on thin, rocky clay soils derived from volcanic or serpentine substrates in grasslands and openings in manzanita-blue oak woodlands. The species is known from six historic populations, all occurring in Napa and Sonoma counties. Urbanization and conversion of land to vineyards have extirpated two of these populations.

The four remaining populations, all restricted to one seventy-acre area, face a variety of threats. One population was reduced in size when the creation of Lake Hennessey inundated much of the site. In December 1990, that remnant population was nearly destroyed when dredge spoils from the lake were placed on top of it. Another population located in Bothe Napa Valley State Park has varied between a low of eight plants and a high of 220 plants over the last ten years. The area covered by a large part of this population is subject to a State proposed campground. The third population occurs near the City of Santa Rosa. A residential subdivision exists on adjacent land above this site. Soil erosion from proposed road and pad construction for house lots potentially threatens this population. The fourth population is scattered over less

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155 See id. at 54,791-92.
156 See id. at 54,792.
157 See id.
158 See id.
159 See id.
160 See id.
161 The City of Napa has since removed the spoils. However, the population has not recovered from the ground disturbance and faces an infestation of exotic weeds. See id. at 54,798.
162 See id.
163 See id. at 54,799.
164 See id.
165 See id.
166 See id.
167 See id.
than five acres of private land and has been reduced dramatically in the recent years by feral pigs and other pressures.\textsuperscript{168}

2. \textit{Calistoga allocarya (Plagiobothrys strictus)}

The Castiloga allocarya is a small erect, annual herb belonging to the borage family.\textsuperscript{169} It grows in pools and swales fed by hot springs and small geysers near Calistoga.\textsuperscript{170} The allocarya persists in only two populations.\textsuperscript{171} Seventy percent of the species' historical range has been extirpated as a result of urbanization and agricultural land use.\textsuperscript{172} One population occurs near Myrtledale hot springs while the other occurs near the airport in the city of Calistoga.\textsuperscript{173} The possibility of future development near the airport site and airport maintenance activities threaten the airport population.\textsuperscript{174} The Myrtledale population is scattered over 10 acres of private land.\textsuperscript{175} The current owner has proposed building a hospital on this site.\textsuperscript{176}

3. \textit{Napa bluegrass (Poa napensis)}

The Napa bluegrass is an erect, tufted perennial bunchgrass.\textsuperscript{177} It lives only in moist, alkaline meadows fed by hot springs within a four mile radius of Calistoga.\textsuperscript{178} Historically, the development of recreational hot springs and the growth of the town have diminished the species range.\textsuperscript{179} Today, only two populations are known to exist; one near the Calistoga airport and the other on private land near Myrtledale Hot Springs.\textsuperscript{180} Development of spas and airport construction have degraded the habitat of

\textsuperscript{168} See id.
\textsuperscript{169} See id. at 54,792.
\textsuperscript{170} See id.
\textsuperscript{171} See id.
\textsuperscript{172} See id. at 54,799.
\textsuperscript{173} See id.
\textsuperscript{174} See id.
\textsuperscript{175} See id.
\textsuperscript{176} See id.
\textsuperscript{177} See id. at 54,792.
\textsuperscript{178} See id.
\textsuperscript{179} See id.
\textsuperscript{180} See id. at 54,799.
both populations. The population near the airport was thought to be extinct until 1987. In 1994 and 1996, about 150 plants remained at this site. The Myrtledale population numbered in the thousands in the early 1980's. However, the land owner has denied access to the property and the population is subject to the same hospital proposal as the Castiloga allocarya.

4. *Sonoma alopecurus (Alopercurus aequalis var. sonomensis)*

The Sonoma alopecurus is another tufted perennial grass. It occurs in moist soils in permanent freshwater marshes. Historically, the range of the species encompassed approximately thirty miles, extending north from Point Reyes Peninsula to Guerneville and east to Cunningham. Now, only eight populations remain. Invasive plant species, trampling and grazing by cattle have dramatically reduced the number of suitable sites. Cattle graze on seven of the existing eight populations. This species also suffers from competition from invasive wetland species at one location. These invasive wetland plants have nearly extirpated the alopecurus from this site. Naturally occurring floods may also be an ongoing threat; one population was damaged by a flash flood in 1993. Because alopecurus populations are normally small (less than 100 individuals) and fluctuate dramatically in size each population faces a high probability of extirpation.

5. *White sedge (Carex albida)*

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181 See id.
182 See id.
183 See id.
184 See id.
185 See id.
186 See id. at 54,793.
187 See id.
188 See id.
189 See id.
190 See id.
191 See id. at 54,800.
192 See id. at 54,802.
193 See id.
194 See id.
195 See id. at 54,803.
The white sedge is an erect, loosely tufted, perennial herb reaching heights of two feet. Historically, the white sedge grew along the Santa Rosa creek and in two marshes. Channelization of the Santa Rosa creek, use of one marsh as a cannery waste disposal site, and the desiccation of the other marsh as a result of groundwater pumping have apparently extirpated the species from these sites. The single known existing population grows in a sphagnum bog approximately 150 feet from a State highway. Any direct impact or change in the hydrology of the area resulting from highway widening might destroy the population. The State operates a wastewater treatment facility approximately 325 yards from this population. Although the facility does not have any current adverse impacts on the remaining population, implementation of the proposed wastewater recycling program could result in the alteration of the remaining habitat.

6. Vine Hill clarkia (Clarkia imbricata)

The Vine Hill clarkia is an herb in the evening-primrose family. The clarkia survives in two populations, one naturally occurring and the other planted in a preserve. The two populations are less than a mile apart. The natural population consists of between 2,000 and 5,000 plants and occurs on an open, flat grassland surrounded by a variety of introduced trees and shrubs. The population is threatened by changing land use, conversion to agriculture, and inadvertent mowing. These activities have already extirpated other historically known populations of the species.

The planted population grows in a natural preserve and has

196 See id. at 54,793.
197 See id.
198 See id.
199 See id. at 54,799.
200 See id.
201 See id.
202 See id.
203 See id. at 54,793.
204 See id. at 54,794.
205 See id.
206 See id.
207 See id. at 54,799.
208 See id.
fluctuated between 200 and 500 plants. This population is susceptible to overcollection. Trespassers have damaged the habitat, trampled vegetation, and collected the seeds of the clarkia.

7. *Pitkin Marsh lily (Lilium pardinum ssp. pitkinense)*

The Pitkin Marsh lily is a perennial member of the lily family reaching heights of six feet. It grows only in permanently saturated, sandy soils in freshwater marshes and wet meadows. All three known populations occur on private land within eight miles of each other. The site containing two populations of the lily was largely destroyed by urbanization in 1961; only 300 individuals remain there. At the second site, wetland fills in the marsh have lowered the water table and resulted in drier soil conditions. This population was nearly extirpated by uncontrolled collection of the plant, seeds, and bulbs. As a result, the population was reduced to only two individuals, but has since expanded slightly to ten individuals. The lily also suffers from grazing by cattle, deer, and other herbivores which has resulted in the loss of flowers and seeds.

8. *Kenwood Marsh checker-mallow (Sidalcea oregana ssp. valida)*

The Kenwood Marsh checker-mallow is a perennial herb which grows up to six feet tall and occurs in freshwater marshes. There are two known populations of the species, both on private land. One population covers less than a quarter of an acre and was reported as having less than

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209 See id. at 54,794.
210 See id. at 54,800.
211 See id.
212 See id. at 54,794.
213 See id.
214 See id.
215 See id. at 54,799.
216 See id. at 54,800.
217 See id.
218 See id.
219 See id.
220 See id. at 54,794.
221 See id.
100 individuals in 1979 and only sixty in 1993. The other population contained only seventy individuals in 1993. One of the two remaining sites is threatened by water diversions from a stream that flows into the marsh where the population occurs. These water diversions may exacerbate the adverse affects of naturally occurring droughts. The checker-mallow is also adversely affected by cattle grazing at both of its existing sites.

9. **Showy Indian clover (Trifolium amoenum)**

Finally, the showy Indian clover is an annual member of the pea family growing to heights of twenty-seven inches. Historically, the species grew at twenty locations in a variety of habitats including low wet grasslands, and grassy hillsides. The historic range of the species extended from the western edge of the Sacramento Valley in Solano County, west and north to Marin and Sonoma counties. Loss of habitat resulting from urbanization and land conversion to agriculture drastically reduced areas of suitable habitat. The plant was believed to be extinct until one locality was discovered in 1993; since then another has been discovered. However, the population discovered in 1993 has since been extirpated. The single existing occurrence of the species consists of about 200 individuals growing on two residential lots in Marin County. A house is already on one of the lots, and on the other lot, one is being built. Both owners have been cooperating in the conservation of the

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222 See id.
223 See id.
224 See id. at 54,800.
225 Although the checker-mallow has not been subject to over-collection, both populations are small enough that limited collecting pressures would also have adverse impacts on the species. See id.
226 See id.
227 See id. at 54,794.
228 See id. at 58,000.
229 See id. at 54,794.
230 See id.
231 See id. at 54,800.
232 See id. at 54,794.
233 See id. at 54,795.
234 See id.
235 See id.
236 See id.
species on their land. However, if the owners further develop or alter their properties, they may no longer contain a suitable habitat for the species. Grazing by cattle and other animals also injures this species and is believed to be responsible for the showy Indian clover’s disappearance from some of it former locations.

IV. JUDICIAL BALANCING ON THE BRINK

We could go on to discuss the Catalina Island mountain-mahogany (Cercocarpus traskiae), one of California’s rarest trees, which is now limited to a single population of only six mature individuals, or the San Clemente Island woodland-star (Lithophragma maximum) and the Santa Cruz Island rockcress (Sibara filifolia). We could also consider the San Francisco lessingia (Lessingia germanorum), which was once common on wind-swept dunes now covered by the City of San Francisco; the Contra Costa goldfields (Lasthenia conjugens); the few-flowered navarretia (Navarretia leucocephala ssp. pauciflora)—limited to only five populations; the many-flowered navarretia (Navarretia leucocephala ssp. plieantha); and the Lake County stonecrop (Parvisedum leiocarpum), which is now restricted to one three acre area. All were listed in the last six months of 1997. The impression would be similar.

What do I want you to take away from these thumbnail sketches of thirteen species victims of human development in California and Hawaii? And what does it have to do with the idea of judicial balancing under the Endangered Species Act? I suggest two lessons.

237 See id.
238 See id. at 54,800.
239 See id. at 54,801.
243 See id. at 33,031.
244 See 50 C.F.R. § 17.12 (1997).
The Danger of Extinction

First, and most obviously, these are indeed species on the brink of extinction. The callippe silverspot butterfly, Kauai cave wolf spider, Vine Hill clarkia, Pitkin Marsh lily, Calistoga allocarya, and Kenwood Marsh checker-mallow cling to existence at only two locations each. The Behren's silverspot, white sedge and the showy Indian clover persist in only one. Clara Hunt's milk-vetch exists at four sites, the relatively fortunate Sonoma alopecurus has eight populations, but its populations are small. The consistent combination of few populations, narrow range, and restricted habitat makes each species a good candidate for extinction.

The sense one gets from reading accounts of recently listed species is that it will take a significant effort to protect what remains and, eventually, to reverse their decline and bring them to a point at which they have a reasonable chance of surviving into the foreseeable future. This is particularly true when we consider the lessons of conservation biology. The perspective of conservation biologists offers a new model of species preservation problems, the “probabilities model.” The conceptual underpinning of the probabilities model is that the survival of any species over time is a matter of chance and that the probabilities are primarily a function of the population size and distribution of the species. A specific detrimental action or project may affect the probabilities of species survival and even drive a species to extinction, but its significance can only be understood in terms of the size and distribution of the population it affects. “Bad luck” comes to every species whether it is

245 See supra Parts III.A.1, A.2, B.2, B.6, B.7, and B.8.
246 See supra Parts III.A.1, B.5, and B.9.
247 See supra Parts III.B.1 and B.4.
250 See Mark Shaffer, Minimum Viable Populations: Coping with Uncertainty, in VIABLE POPULATIONS FOR CONSERVATION 69, 76 (Michael E. Soule ed., 1987).
251 “If the species is to survive 200 years, management must ameliorate the prevailing catastrophe scenario or more than one population must be maintained.” Id.
protected by the Endangered Species Act or not. For a species to have a
decent chance of survival it must be sufficiently numerous and sufficiently
widespread to survive the catastrophic events which are an inevitable part
of life on this planet. None of our thirteen species exist in sufficient
numbers over a sufficiently large area to survive even a modest
catastrophe.\footnote{See supra Part III.}

But rarity and the dangers it brings are not the only bad news. Each of our thirteen species is subject to a variety of threats from human
occupation and degradation of habitat and the introduction of exotic
species.\footnote{See supra Part III.} Road construction, housing development, cattle grazing, golf
courses, pesticide residue and spitting spiders form a phalanx of threats
that any one of these species will be lucky to survive. To take away what
little they have left would relegate many to extinction.

Why do so many of the species recently listed seem to be in such
alarmingly bad shape? Part of the explanation may be the United States
Fish and Wildlife Service’s apparent lack of enthusiasm for additional
listings. Almost ten years ago, the agency received a battering in federal
court for failing to list the Northern Spotted Owl as a threatened species.\footnote{See Northern Spotted Owl v. Hodel, 716 F. Supp. 479 (W.D. Wash. 1988)
(overturning the USFWS decision not to list the spotted owl and concluding that USFWS
had disregarded expert opinion, including the opinions of experts it employed).}

A change of administration does not seem to have changed the view of the
agency. A recent report issued by Public Employees for Environmental
Responsibility (PEER) entitled \textit{War of Attrition: Sabotage of the
Endangered Species Act by the U.S. Department of Interior}, documents
lobbying by the agency to reduce the amount of money appropriated for
listing.\footnote{War of Attrition: Sabotage of the Endangered Species Act by the U.S. Department of
Dec. 1997, at 5 (on file with the \textit{William and Mary Environmental Law and Policy
Review}).}

States District Court for the District of Columbia overturned the agency’s
decision not to list the Canada Lynx as threatened or endangered on the
ground that “the agency [made] a number of unsupported statements
which contain[ed] significant factual errors contradicted by overwhelming
record evidence.”\footnote{958 F. Supp. 670, 682 (D.D.C. 1997).} The court found that the significant factual errors
were “clear indications that the agency’s decisionmaking, [was] based on
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glaringly faulty factual premises . . . .” 257 Reluctance to list in general, may insure that those species that are listed are in dire straits indeed.

B. Apparent Value

The second lesson I hope you will draw from our thirteen profiles is that most listed species seem insignificant in themselves. The world contains other species of cave spiders, butterflies, sedges, lilies and checker-mallows. None of these thirteen species is likely to appear on a postage stamp. They are poor candidates for television nature programming. This apparent lack of significance is significant itself because it suggests the outcome of any process of judicial balancing in which any of these modest bits of creation are pitted against, say for instance, the right of the citizens of Alameda County to enjoy their park, a Hawaiian resort housing development, a new state campground, the safety-minded expansion of the Calistoga airport, a state highway, or a municipal wastewater recycling facility.

Traditionally, injunction is an equitable remedy; “it is not a remedy which issues as of course.”258 Absent a ban on judicial balancing, a United States District Court judge would consider the relative harm to the parties before the court, as well as “the public interest,”259 when faced with the decision whether to enjoin some activity that threatens a population of endangered species. The Supreme Court stated in Weinberger v. Romero-Barcelo, which was decided under the Clean Water Act,260 that in each case, a court must balance the competing claims of injury and must consider the effect on each party of the granting or withholding of the requested relief.261 Although particular regard should be given to the public interest, “[t]he grant of jurisdiction to ensure compliance with a statute hardly suggests an absolute duty to do so under any and all circumstances . . . .”262 Under this test, a judge would have the discretion to refuse to enjoin an action that might result in the destruction of a species or one of its few remaining populations, even when that action

257 Id. at 682.
259 See id. at 312-13
261 See id. at 312.
262 Id. at 313.
clearly violated the Endangered Species Act.

Further, in striking the balance our judge would weigh the effects on the parties in the case, not on the species at risk. In other words, she would balance the economic dislocation associated with enjoining the species threatening project against the harm species extinction will cause the environmental plaintiffs and not against the harm it will cause the species. Human defenders of protected species focus their concern on threats to the species. The risk of annihilation makes for compelling arguments, but protected species are not parties in the law suits brought to protect them. Therefore, courts, in balancing the harm between parties would consider, not the direct harm the species would suffer, but the indirect harm its human defenders would suffer. The extinction of a species of California butterfly is a significant event—the most significant possible event for all the members of that species. It will not, however, drive the Sierra Club or Defenders of Wildlife out of business, and it will engender only a passing phase of depression and panic in organization members who once enjoyed observing the butterfly and wandering the hills where it lived.

In *Amoco Production Co. v. Village of Gambell*, decided under the National Environmental Policy Act, the Supreme Court admitted: "Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable. If such injury is sufficiently likely, therefore, the balance of harms will usually favor the issuance of an injunction to protect the environment." However, the actual willingness of the Supreme Court to overturn injunctions in cases involving environmental harm undercuts any comfort this language might provide.

Certainly, we can afford to lose a butterfly or two. Even more certainly, we will lose more than a few in the years to come. Some scholars have suggested developing priority systems for the preservation of species. The folly of such systems is outside the scope of this article. There is, however, no question that judicial balancing is no substitute for a priority system. If we allow courts to balance the future of species, they

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will deal with each case and species in isolation, ignoring the pattern of species extinction. A lawyer arguing for the preservation of a California marsh plant species would be hard pressed to convince a judge to hear evidence of the extent and significance of the global biodiversity crisis. Published cases about endangered species rarely if ever consider this broader context. This blindness to the cumulative impact of harm to endangered species populations would encourage balancing in favor of development and against species. In sum, application of the standard tests for the issuance of an injunction would lead many a reasonable federal judge to insist that these species give a little ground to some worthy human endeavors, unaware or unmoved by how little ground these species have to give.

V. CONCLUSION

For twenty years judges of every political stripe in every region of the country have stopped economically significant activities to protect economically insignificant species. They have done so because the dominant interpretation of the Endangered Species Act has forced them to do so, taking the troublesome issue out of their hands. Philosophers wrestle with how to compare the value of a cave spider and a condominium, debating the issue at their leisure. Federal district court judges, philosophers though many may be, must make decisions. No

267 One significant exception to this general proposition is the District of Columbia Circuit Court's decision in National Association of Homebuilders v. Babbitt, 130 F.3d 1041, 1052-54 (D.C. Cir. 1997), in which the court discussed the value of biological diversity as a whole to buttress Congress’ power to regulate intra-state endangered species under the interstate commerce clause.

268 One embarrassing fact deserves recognition. Two unreversed federal district court cases have applied the traditional balancing test to endangered species act claims. See Sierra Club v. Lujan, 36 Env’t. Rep. Cas. (BNA) 1533, 1554 (W.D. Tex. 1993); Sierra Club v. Lyng, 694 F. Supp. 1260, 1277 (E.D. Tex. 1988), aff’d in part and vacated in part on other grounds sub nom. Sierra Club v. Yeutter, 926 F.2d 429 (5th Cir. 1991). Both cases issued injunctions despite the application of the traditional test. What is worse, I was counsel for the plaintiffs in one of those cases, Sierra Club v. Lyng. Accordingly, I must smile when I assert that both cases involved such compelling factual situations—clearcutting on Texas national forests in the face of a more than 40% decline in the population of the endangered Red-Cockaded Woodpecker and the potential annihilation of an entire eco-system in the Edwards Aquifer in south central Texas—that the balancing of harm led to far clearer results than it would have with any of our thirteen recently listed species.
matter what their political convictions, they will often tip the balance in favor of what they can see and count and enjoy and against a species of relatively mundane creatures whose only distinction is the real possibility that they will disappear from this planet for the rest of imaginable time. And the slightest tip of the scale will often seal the fate of species already so close to oblivion.

Finally, despite their apparent insignificance, there is also something wonderful about every one of these thirteen species, something worth preserving: the relationship between the butterflies and the violets they require to survive; the ability of the cave spider to hunt without eyes; the flowering lilies and mallows and peas. What are we willing to lose forever?