Weyerhaeuser v. U.S. Fish and Wildlife Service: Swirling Uncertainty around the Definition of Habitat

INTRODUCTION

Habitat loss and degradation are the leading causes of species endangerment in North America. Increasingly, climate change is becoming a significant factor in species endangerment as it disrupts migration routes, changes animal behavior, and shifts species' ranges. In the coming decades, habitat loss and climate change will threaten more than one million species. To prevent future extinctions, governments need to be flexible in responding to threats species face and proactive in protecting current and potential future habitat.

Unfortunately, in *Weyerhaeuser v. U.S. Fish and Wildlife Service*, the Supreme Court missed an opportunity to interpret existing law as granting the United States Fish and Wildlife Service (the Service) this flexibility. *Weyerhaeuser* was about whether the Service could designate land as critical habitat under the Endangered Species Act (ESA) even though the endangered species at issue, the dusky gopher frog, did not currently live there and could not live there without "reasonable" modifications to the land.⁵ The Court held that critical habitat must be "habitat," but it failed to define what constitutes habitat.⁶ If habitat is defined narrowly, the results could be catastrophic; restricting the Service's ability to protect land for species reintroduction. However, the text, purpose, and history of the ESA all support a broad definition of habitat: one that includes areas that might require some modification to support a sustainable

DOI: https://doi.org/10.15779/Z38BK16Q47

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^{1.} Amy N. Hagen & Karen E. Hodges, Resolving Critical Habitat Designation Failures: Reconciling Law, Policy, and Biology, 20 CONSERVATION BIOLOGY 399, 400 (2006).

^{2.} J.B. Ruhl, Climate Change and the Endangered Species Act: Building Bridges to the No-Analog Future, 88 B.U. L. REV. 1, 22 (2008); Camille Parmesan & Gary Yohe, A Globally Coherent Fingerprint of Climate Change Impacts Across Natural Systems, 421 NATURE 37, 38–39 (2003).

^{3.} See Intergovernmental Panel on Climate Change, Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, IPBES 7.10 Add. 1 (May 29, 2019).

^{4.} See Holly Doremus, The Endangered Species Act: Static Law Meets Dynamic World, 32 WASH. U. J. L. & POL'Y 175, 176 (2011).

^{5.} Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361, 366 (2018).

^{6.} Id. at 372.

population. This In Brief first describes the ESA, then discusses the Court's holding in *Weyerhaeuser*, and finally argues that habitat should be defined broadly.

I. DISCUSSION

A. The Endangered Species Act

Congress passed the ESA in 1973 to preserve ecosystems and protect endangered species from extinction. The ESA is an effective tool heralded by supporters as one of the strongest laws for protecting biodiversity passed by any nation. It embodies the proposition that each endangered species has "aesthetic, ecological, educational, historical, recreational, and scientific value" that deserves protection. It also explicitly states that conservation requires the use of "all methods and procedures" to protect a species, including the acquisition and protection of habitat. Congress has amended the ESA several times, including an amendment requiring the monitoring of both candidate and recovered species. 11

As required by the ESA, when the Secretary of the Interior lists a species as endangered, they must also designate the critical habitat for the species. ¹² The Secretary must "tak[e] into consideration the economic impact . . . and any other relevant impact" before designating an area as critical habitat. ¹³ The Secretary "may exclude any area from critical habitat" based upon a determination that the "benefits of such exclusion outweigh the benefits of specifying [an] area as critical habitat," unless exclusion would result in species extinction. ¹⁴ The ESA defines "critical habitat" as:

[T]he specific areas within the geographical area occupied by the species . . . on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and specific areas outside the geographical area occupied by the species . . . upon a determination by the Secretary that such areas are essential for the conservation of the species. ¹⁵

^{7. 16} U.S.C. § 1531(b) (2018) ("The purposes of this chapter are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species.").

^{8.} The Endangered Species Act: A Wild Success, Center for Biological Diversity, https://www.biologicaldiversity.org/campaigns/esa wild success/ (last visited Feb. 28, 2020).

^{9. 16} U.S.C. § 1531(a)(3).

^{10. 16} U.S.C. § 1532(3).

^{11.} A History of the Endangered Species Act of 1973, U.S. Fish & Wildlife Serv., (Aug. 2011), https://www.fws.gov/endangered/esa-library/pdf/history_ESA.pdf.

^{12. 16} U.S.C. § 1533(a).

^{13. 16} U.S.C. § 1533(b)(2).

^{14.} *Id*.

^{15. 16} U.S.C. § 1532(5)(A).

A critical habitat designation requires federal agencies to consult with the Service when their actions might "destroy or adversely modify" critical habitat. ¹⁶ It does not directly limit the rights of private landowners nor does it affect all activities that occur within the designated area. ¹⁷ Only activities that involve the federal government in some manner, like those involving a federal permit, are affected by critical habitat designation. ¹⁸ In the event that the Secretary determines that an agency action would harm critical habitat or jeopardize the continued existence of a listed species, the agency must either terminate the action, implement an alternative, or seek an exemption from an executive committee. ¹⁹

B. Weyerhaeuser v. U.S. Fish and Wildlife Service

Weyerhaeuser revolves around the dusky gopher frog (Rana sevosa), an endangered species that spends most of its time living underground in upland longleaf pine forests.²⁰ Its historic range once included coastal Alabama and Louisiana, but due to habitat loss, the frog is now found only in two adjacent counties in Mississippi.²¹ This leaves it especially vulnerable to extinction from local events like a hurricane or an infectious disease outbreak. ²² After reviewing the scientific data, the Service designated a 1,544 square acre site (Unit 1) in Louisiana as critical habitat.²³ Outside of Mississippi, Unit 1 was the last known habitat of the species, which last inhabited the site in 1965.²⁴ They chose this site because it has five ephemeral ponds of "remarkable quality," which are important to the frog for breeding.²⁵ These ponds are extremely rare and difficult to replicate artificially.²⁶ However, the site is currently used as a timber plantation that would require modifications to make it habitable to the frog.²⁷

Unit 1 is owned by Weyerhaeuser Company and a group of family landowners.²⁸ While the Service's designation would not affect current timber operations, landowners had already created plans to more profitably develop Unit 1.²⁹ The Service commissioned a report stating that because the land has been designated as critical habitat, any further development might require

^{16.} U.S. Fish & Wildlife Serv., *Critical Habitat: What is It?*, (Mar. 2017) https://www.fws.gov/endangered/esa-library/pdf/critical_habitat.pdf.

^{17.} *Id*.

^{18.} Id.

^{19.} Nat'l Ass'n of Home Builders v. Defs. of Wildlife, 551 U.S. 644, 652 (2007).

^{20.} Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361, 366 (2018).

²¹ Id at 365

^{22.} Id. at 366.

^{23.} Id.

^{24.} Id.

^{25.} *Id*.

^{26.} Id.

^{27.} Id.

^{28.} Id. at 367.

^{29.} *Id*.

permits from the Army Corps of Engineers.³⁰ If unchallenged, this designation might functionally bar the Army Corps from issuing a permit at all, which would stall development on Unit 1 and cost Weyerhaeuser as much as \$33.9 million.³¹ The Service concluded that this potential cost to Weyerhaeuser was not "disproportionate" to the conservation benefits of designation and declined to exclude Unit 1 from the critical habitat zone.³² Weyerhaeuser disagreed, arguing that the substantial cost was "disproportionate" to any conservation benefit because the dusky gopher frog couldn't survive on Unit 1 without reasonable habitat modifications.³³ Thus, Weyerhaeuser sued the Service, challenging its critical habitat designation.³⁴

The lower courts upheld the critical habitat designation.³⁵ The district court concluded that the Service adequately supported its finding that Unit 1 was "essential" with substantial scientific information.³⁶ The Fifth Circuit affirmed, reasoning that requiring a designation to be "essential" does not imply that the land be "habitable."³⁷ If "essential" meant "habitable," it would be redundant to then require occupied critical habitat to have the relevant "physical or biological features." In essence, this would conflate the two types of critical habitat to mean the same thing.³⁸ Because the ESA distinguishes these two types of critical habitat, the 5th Circuit rejected this habitability requirement and concluded that critical habitat does not need to be habitable.³⁹

The Supreme Court reversed, vacated the judgment, and remanded back to the Fifth Circuit. The Court first held that the definition of the phrase "critical habitat" in the ESA is the portion of a species' "habitat" that is essential to its continued existence.⁴⁰ It reached this definition by relying on the ordinary understanding of adjectives: words that modify nouns.⁴¹ The word "critical" modifies the word "habitat," and thus, nothing can be designated critical habitat unless it is first habitat.⁴²

However, because "statutory language cannot be construed in a vacuum," the Court then considered the meaning of "critical habitat" within the context of

^{30.} Id. at 366-67.

^{31.} Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361, 366 (2018).

^{32.} *Id*.

^{33.} *Id*.

^{34.} *Id*.

^{35.} Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 40 F. Supp. 3d 744, 761 (E.D. La. 2014), aff'd, 827 F.3d 452 (5th Cir. 2016), vacated and remanded sub nom. Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361 (2018), cert. granted, vacated sub nom. Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 139 S. Ct. 590 (2018).

^{36.} Id. at 761.

^{37.} Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 827 F.3d 452, 468 (5th Cir. 2016), vacating and remanding sub nom. Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361 (2018), cert. granted, vacating sub nom. Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 139 S. Ct. 590 (2018).

^{38.} *Id*.

^{39.} *Id*.

^{40.} Weyerhaeuser, 139 S. Ct. at 368.

^{41.} Id.

^{42.} *Id*.

the entire statute.⁴³ Under the ESA, when the Secretary lists an endangered species, they must "designate any habitat of such species which is then to be considered critical habitat."⁴⁴ The Court reaffirmed that habitat can include unoccupied areas or areas where the species does not currently live, but it did not comprehensively define the term "habitat."⁴⁵ This leaves open the question of whether unoccupied areas that require modification to support a sustainable species population can be considered habitat. Before the Fifth Circuit could consider the definition of the word "habitat" on remand, the two parties settled, leaving habitat's legal definition unresolved.⁴⁶

II. ANALYSIS

By dodging the question of what constitutes habitat, the Supreme Court left unanswered an issue that could have significant implications for the ESA's implementation going forward. Limiting habitat only to those areas where a species could live without modification at the time of designation would restrict the amount of land available for designation. This could lead to the extinction of more species in the coming decades. While the Supreme Court was correct in ruling that critical habitat is a subset of habitat that is "essential to the conservation of the species," the Fifth Circuit was also correct in ruling that the ESA does not impose a "habitability" requirement on unoccupied land before it can be designated critical habitat. ⁴⁷ Fortunately, the Supreme Court's ruling and the Fifth Circuit's ruling are not mutually exclusive. Habitat should be defined broadly under the ESA to include land that an endangered species could live on with some modifications. Further, the text, purpose, structure, and history of the ESA, as well as sound public policy, all support a broad definition of habitat.

The plain text of the ESA supports a broad definition of habitat. The text itself does not define habitat, but it does define occupied and unoccupied critical habitat. While both must be "essential for the conservation of the species," the ESA only requires that occupied, not unoccupied, critical habitat have "physical or biological features . . . essential to the conservation for the species." The Supreme Court has held that when limiting language appears in one statutory provision, but not an adjacent provision, there is a strong presumption that Congress purposely omitted that language. With no requirement of any

^{43.} Id. (quoting Sturgeon v. Frost, 136 S. Ct. 1061, 1070 (2016)).

^{44. 16} U.S.C. § 1533(a)(3)(A)(i).

^{45.} Weyerhaeuser, 139 S. Ct. at 369.

^{46.} See David Miller, Settlement Eliminates 1,500 Acres of Designated Dusky Gopher Frog Critical Habitat, ENDANGERED SPECIES L. & POL'Y (July 18, 2019), https://www.endangeredspecieslawandpolicy.com/settlement-eliminates-1500-acres-of-designated-dusky-gopher-frog-critical-habitat.

^{47.} See Weyerhaeuser, 139 S. Ct. at 369; Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 40 F. Supp. 3d 744, 761 (E.D. La. 2014).

^{48. § 1533(}b)(2).

^{49.} See Allison Engine Co. v. United States ex rel. Sanders, 553 U.S. 662, 671 (2008); Dep't of Homeland Sec. v. MacLean, 135 S. Ct. 913, 919 (2015).

"physical or biological features" for unoccupied critical habitat, the ESA endows the Service with substantial discretion. This interpretation supports the Fifth Circuit's opinion, which emphasized flexibility in reasoning that unoccupied habitat need not be immediately habitable to be considered critical habitat; the Secretary just needs to determine that it is essential to the conservation of the species.⁵⁰

The purpose of the ESA also supports a broad definition of habitat. The Supreme Court has recognized that "the plain intent of Congress in enacting [the ESA] was to halt and reverse the trend toward species extinction, whatever the cost." The purpose is not merely to prevent extinction but to allow a species to recover from its endangered or threatened status. Sepecies recovery inherently requires expansion into unoccupied territory to support a larger, stabilized population. And while other sections of the ESA, such as the prohibition against a taking of an endangered species, focus on the protection of individual animals, the goal of critical habitat is to allow species to recover. The ESA explicitly states that the primary goal of the ESA is to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." Preventing land from being designated as critical habitat when it needs reasonable modifications to become habitable undermines this dominant theme of species protection and recovery.

The history of the ESA and its subsequent amendments further supports a broad definition of habitat. The ESA is the third effort by Congress to pass a law protecting endangered species, and it was adopted in part to provide the Service with greater flexibility in doing so.⁵⁶ The congressional record reveals a recognition that "habitats have been cut in size, polluted, or otherwise altered so that they are unsuitable."⁵⁷ Thus, members of Congress agreed that habitats must be protected.⁵⁸ One of the key supporters of the bill, Representative Sullivan, declared that "the ultimate effectiveness of the Endangered Species Act will depend on the designation of critical habitats."⁵⁹ In amending the ESA to add a definition of critical habitat, Congress explicitly rejected a requirement that an unoccupied critical habitat be an area that is "periodically inhabited by the

^{50.} Markle Interests, LLC v. U.S. Fish & Wildlife Serv., 827 F.3d 452, 468 (5th Cir. 2016).

^{51.} See Tenn. Valley Auth. v. Hill, 98 S. Ct. 2279, 2297 (1978).

^{52.} See Sierra Club v. U.S. Fish & Wildlife Serv., 245 F.2d 434, 438 (5th Cir. 2001).

^{53.} See Michael J. Bean, The Endangered Species Act: Science, Policy, and Politics, 1162 ANN. N.Y. ACAD. Sci. 369 (2009).

^{54.} See Kalyani Robbins, Recovery of an Endangered Provision: Untangling and Reviving Critical Habitat Under the Endangered Species Act, 58 BUFF. L. REV. 1095, 1104 (2010).

^{55. 16} U.S.C. § 1531(b) (2018).

^{56.} H.R. REP. NO. 93-412 (1973), reprinted in 1 CONG. RESEARCH SERV., A LEGISLATIVE HISTORY OF THE ENDANGERED SPECIES ACT OF 1973, AS AMENDED IN 1976, 1977, 1978, 1979, AND 1980, 140 (1982).

^{57.} *Id.* at 358.

^{58.} See id.

^{59.} Id. at 497.

species"⁶⁰ or one where "the species can be expected to expand naturally."⁶¹ This recognition of a habitat's importance in preventing species extinction indicates a desire to give the Service substantial flexibility in designating critical habitat.

Such a reading is consistent with appellate court interpretations of the ESA as well. In interpreting the ESA, some lower courts have declined to put additional constraints on the Service's designation authority. In Alaska Oil & Gas Ass'n v. Jewell, the 9th Circuit upheld the Service's critical habitat designation based on long-term climate models for polar bears, reasoning that it makes little sense to "limit its protection to the habitat that the existing, threatening population currently uses" when the ESA's purpose is to ensure species recovery. 62 In Bear Valley Mutual Water Co. v. Jewell, the 9th Circuit upheld the designation of unoccupied critical habitat for the Santa Ana sucker even though the area was not habitable for the endangered species. 63 And in Home Builders Ass'n of Northern California v. U.S. Fish & Wildlife Service, the 9th Circuit upheld the critical habitat designation for a group of fifteen endangered or threatened vernal pool species, declining to require the Service to determine "exactly when conservation will be complete." 64 In each of these decisions, the 9th Circuit interpreted habitat broadly, supporting its rulings by looking to the text, purpose, and history of the ESA. There is no reason courts should stop doing this now.

A broad definition of habitat is essential for addressing the problems of climate change.⁶⁵ Climate change magnifies the difficulty of predicting the effectiveness of conservation measures because of the uncertainty involved in predicting its regional impacts.⁶⁶ Climate change is also expected to increase the severity of extreme weather events, shift the ranges of many species, and increase the risk of disease outbreaks.⁶⁷ Early identification of the critical habitats species require is a vital part of helping species "transition" through Earth's "ecological reshuffling."⁶⁸ Moving forward, the Service must be more dynamic and flexible in responding to "inevitable" changes brought about by climate change, or more species will go extinct.⁶⁹

The lack of a unified scientific definition additionally supports a broad definition of habitat. The word "habitat" has been used in at least 2.4 million

^{60.} Id. at 879.

^{61.} Id. at 1065.

^{62.} See Alaska Oil & Gas Ass'n v. Jewell, 815 F.3d 544, 556 (9th Cir. 2016).

^{63.} See Bear Valley Mut. Water Co. v. Jewell, 790 F.3d 977, 994 (9th Cir. 2014).

^{64.} See Home Builders Ass'n of N. Cal. v. U.S. Fish & Wildlife Serv., 616 F.3d 983, 989 (9th Cir. 2010).

^{65.} See Doremus, supra note 4, at 176.

^{66.} See id. at 229.

^{67.} See EPA, Climate Impacts on Ecosystems, (Jan. 19, 2017), https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-ecosystems .html.

^{68.} See Ruhl, supra note 2, at 60.

^{69.} See Doremus, supra note 4 at 215.

publications on Google Scholar, with no unified definition. To Incorrect definitions and usage of habitat can lead to misinterpreting scientific findings, inefficient usage of conservation resources, and overall confusion among scientific scholars, government officials, and the public. The word "habitat" has been used to refer to everything from the microorganism habitat of hot spring pools for the Banff Springs snail to the massive plains of the Serengeti for the wildebeest. This suggests that understanding a species' habitat is an "organism-specific" inquiry that depends on a multitude of factors. To rexample, the identification of killer whales' critical habitat was delayed for years because of disagreement over the exclusion of nongeophysical elements, such as prey availability and acoustic underwater disturbance. This strong disagreement in the scientific literature justifies a broader definition of habitat, as aiding on the side of caution would protect, rather than constrain, the Service's discretion in designating critical habitat.

To ensure the continued success of the ESA, habitat must be defined broadly to allow critical habitat designations for areas that require reasonable modification to support a species. While proposing a comprehensive legal definition for habitat is outside the scope of this In Brief, a definition that encompasses the places a species currently lives, the places within a species historic range, and the places likely to support a species in the near future is a good start. This would allow the Service the flexibility necessary to preserve species while also protecting against the concern that a broad definition of habitat would enable the Service to designate any area as critical habitat.⁷⁵ This definition would not allow just any habitat to be designated as critical habitat, as the Service would still need to justify its decision by demonstrating the habitat is essential to the conservation of the species.⁷⁶ A definition such as this would not conflict with the *Weyerhaeuser* decision, which only required critical habitat to be habitat, without defining what constitutes habitat.

^{70.} See David Anthony Kirk et al., Our Use, Misuse, and Abandonment of a Concept: Whither Habitat? 8 ECOLOGY AND EVOLUTION 4997, 4998 (2018).

^{71.} *Id.* at 4199.

^{72.} Id. at 4198.

^{73.} *Id*.

^{74.} Id. at 4204.

^{75.} Kristoffer Whitney, Critics of the Endangered Species Act are Right About What It Does. But They Miss the Point, THE WASH. POST (Aug. 2, 2018), https://www.washingtonpost.com/news/made-by-history/wp/2018/08/02/critics-of-the-endangered-species-act-are-right-about-what-it-does-but-they-miss-the-point/.

^{76.} For example, the Service could potentially justify designating critical habitat for the reintroduction of the grizzly bear in Sequoia National Park, a historic home for the grizzly bear that is already protected from human development. However, it would be unrealistic to designate critical habitat for the grizzly bear near San Francisco, California, as the surrounding area is developed and the bear's natural requirements for habitat could not be made habitable with reasonable modifications.

CONCLUSION

In Weyerhaeuser, the Court correctly held that critical habitat must also be habitat, but it declined to define the word "habitat." A broad definition of habitat would respect the spirit and history of the ESA without disregarding its plain text. However, if habitat is defined narrowly, the ESA will become a less effective tool in protecting certain species, such as the dusky gopher frog, making them and many others more susceptible to extinction.

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