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Home Builders v. Norton: The Role of International Boundaries under the Endangered Species Act

Benjamin Fenton

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Home Builders v. Norton:

The Role of International Boundaries under the Endangered Species Act

Benjamin Fenton*

In Home Builders v. Norton the United States Fish and Wildlife Service (FWS) argued that the Arizona pygmy-owl should be listed endangered as a distinct population segment simply because it is the taxon's sole remaining domestic population. Ruling against the FWS, the Ninth Circuit held that based upon the FWS policy a population of a species can not be listed as endangered simply because it is found within the United States. The court explained that international boundaries can be considered in the first prong of the policy recognizing distinct population segments but not in the second prong of that policy – the “significance” prong. While the Ninth Circuit's interpretation of the FWS policy was correct, the case highlights one of the policy's flaws. As it stands it does not accord sufficient weight to domestic populations of species. International boundaries should be considered beyond the first prong of the DPS policy if the domestic population of a species is endangered. In some circumstances an endangered domestic population should be listed primarily because it is domestic.

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Introduction .............................................................................................................577

I. The ESA’s Domestic Focus and its Protection of Entire Species and Smaller Subpopulations ..............................................578

II. The Joint DPS Policy Provides for a Limited Consideration of International Boundaries in Listing Decisions .......................582
   A. The Services’ policy defining Distinct Population Segment includes consideration of international boundaries for determining whether a population is discrete ........................................................................................................582
   B. Consideration of international boundaries is in tension with the ESA’s strictly science mandate .............................................583
   C. The ESA must consider international boundaries because it has a domestic focus ......................................................................584

III. The FWS Listed the Cactus Ferruginous Pygmy-Owl as Endangered, Partly because of International Boundaries ..........586
   A. The Mexican border bisects the western range of the pygmy-owl ............................................................................................586
   B. Why the FWS thought the Arizona pygmy-owl merited protection as a DPS ...........................................................................587
   C. The FWS failed to support its listing decision properly ..............................................................................................................588

IV. Home Builders v. Norton ...........................................................................590
   A. The court found that the Arizona population satisfied the discreteness prong of the DPS Policy ..............................................591
   B. The FWS did not satisfy the significance prong of the DPS Policy ..........................................................................................592

V. International Boundaries Should Play a More Important Role in Listing Decisions ........................................................................593
   A. International boundaries are meaningless under the current DPS Policy if the agency does not satisfy the “significance” prong ........................................................................................................593
   B. The policy goals behind the “significance” prong support the consideration of international boundaries in listing decisions ........................................................................................................594
   C. The inherent limitations of national legislation also support a greater role for international boundaries in listing decisions ........................................................................................................595
   D. The agencies’ broad discretion to consider international boundaries has led to inconsistent implementation ................................597
   E. A new approach to the DPS Policy: Close examination of the conservation status of the foreign population ................................599

Conclusion .............................................................................................................600
INTRODUCTION

On March 10, 1997 the United States Fish and Wildlife Service (FWS) listed the Arizona pygmy-owl, a population segment of the larger cactus ferruginous pygmy-owl (CFPO), endangered under the Endangered Species Act (ESA). The FWS found that the Arizona pygmy-owl, whose population had shrunk drastically over its range in southern Arizona, qualified as a Distinct Population Segment (DPS) under the ESA. This classification allows a subpopulation of a species to receive protection under the ESA.

In support of the decision to list the Arizona pygmy-owl, the FWS argued that it should be listed simply because it is its species' sole remaining U.S. population. Under the joint FWS and National Marine and Fisheries Service (NMFS) "Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act" (hereinafter DPS policy), which constitutes the primary policy regarding the recognition of a DPS, consideration of international boundaries in support of a listing decision is permissible. In this instance, however, the FWS decision to list the owl primarily because it is delimited from the rest of its species by international boundaries does not accord with the DPS Policy. Under the DPS policy the existence of an international boundary can be considered only in relation to one prong of the DPS policy's two pronged test and thus cannot be the primary factor in listing a population as a DPS.

The National Association of Home Builders challenged the FWS application of the DPS Policy to the Arizona pygmy-owl. On appeal the Ninth Circuit reversed the FWS decision and held that the pygmy-owl in Arizona did not qualify as a DPS under the ESA. The court found that the FWS position was not in accordance with the FWS and NMFS DPS Policy. Although the court was correct that the FWS is not permitted to list a population under the ESA simply because it is the sole remaining U.S. population, the case highlights how the current DPS Policy fails to properly address international boundaries and the protection of domestic populations in listing decisions.

7. Id. at 849.
As it stands now, the DPS Policy does not give the existence of international boundaries the bite Congress intended. International boundaries are currently used in listing decisions to help protect endangered or threatened domestic populations. However, the DPS Policy does not give international boundaries sufficient consideration in listing decisions. The policy also misguided allows agencies discretion to determine when to factor international boundaries into a listing decision. Under the DPS Policy, agency consideration of international boundaries in listing decisions has been inconsistent and unpredictable.

The FWS position, that the Arizona pygmy-owl should be protected because it is the last remaining domestic population, was based upon a policy consideration outside the FWS’s own DPS Policy. However, this position was in line with congressional intent regarding how agencies should consider international governmental boundaries in listing decisions. Nonetheless, the Ninth Circuit’s decision reversing the listing decision was correct because a basic principle of administrative law is that an agency must follow its own rules, and the FWS did not do so in this case.8

Altering the current DPS Policy could realign it with congressional intent and also help to reduce agency inconsistency in how it factors international boundaries into listing decisions. Defining the policy more clearly and constraining agency discretion will allow interested parties a clearer perception of how international boundaries will be considered by the services.

Part I of this note will provide background to the ESA and its provisions. Part II will introduce and discuss the joint DPS Policy of the FWS and NMFS. It will show that the ESA, and by extension the DPS, have a domestic focus on species conservation. Part III will examine how the FWS determined that the Arizona pygmy-owl constituted a DPS. It will then discuss why this determination contravened the FWS’s own DPS Policy. Part IV will focus on the litigation surrounding the listing decision. It will examine and critique the Ninth Circuit’s response to the FWS decision to list the Arizona pygmy-owl as a DPS, in clear contravention of the current DPS Policy. Finally, Part V will offer a critique of the current DPS Policy. It will then suggest a new approach to DPS Policy which better implements the ESA’s goals.

1. THE ESA’S DOMESTIC FOCUS AND ITS PROTECTION OF ENTIRE SPECIES AND SMALLER SUBPOPULATIONS

In 1973 Congress passed what the Supreme Court termed “the most comprehensive legislation for the preservation of endangered species

ever enacted by any nation.”

The ESA marked a substantial shift from much of the earlier endangered species legislation. Previous legislation focused on the protection of species facing worldwide extinction. Congress gave the ESA a more domestic focus by protecting subspecies and distinct population segments within the United States.

The ESA delegates the authority to provide protection to endangered and threatened species to the Secretaries of Interior and Commerce. The Secretaries then delegate this task to their wildlife agencies: the Fish and Wildlife Service (FWS) within Interior and the National Marine and Fisheries Service (NMFS) within Commerce.

Because the ESA’s protections apply only to listed species, the linchpin of the Act is the section 4 listing process. Only when a species is listed as endangered or threatened under the ESA is it protected. As a result, much of the litigation and controversy surrounding the ESA involves whether or not a decision to list a species is appropriate.

The initial requirement for listing under the ESA is that the wildlife in question constitutes a “species.” The original definition of “species” under the ESA, adapted from the Marine Mammal Protection Act of 1966 (MMPA), comprised “any subspecies of fish or wildlife or plants and any other group of fish or wildlife of the same species or smaller taxa in common spatial arrangement that interbreed when mature.” Significantly, the MMPA broke from previous conservation legislation by providing protection to subspecies, population segments of wildlife that constituted only a portion of the larger species. One central reason for the inclusion of subpopulations was that Congress intended to use the


14. The section 4 listing process has led one professor to describe the Act as “meek as a kitten unless an imperiled creature appears on the statute’s lists of threatened and endangered species.” Daniel J. Rohlf, There’s Something Fishy Going on Here: A Critique of the National Marine Fisheries Service’s Definition of Species Under the Endangered Species Act, 24 ENVTL. L. 617, 618 (1994)

MMPA to protect Alaskan polar bears but was uncertain whether the Alaskan polar bears constituted a separate species or merely a segment of the larger species of polar bears.\textsuperscript{16} Therefore this definition was, in part, a result of Congress's intent to ensure the protection of the Alaskan polar bear even if the larger species did not merit protection under the MMPA.\textsuperscript{17}

In 1978, Congress amended the definition of “species” under the ESA into its present form. The new definition replaced “any other group of fish or wildlife of the same species or smaller taxa in common spatial arrangement” with the term “distinct population segment.”\textsuperscript{18} It is unclear whether this change altered the meaning of “species” under the Act. The amended definition continues to include lower taxonomic categories within the definition of “species.”\textsuperscript{19} Congress also provided that DPS only applies to vertebrates.\textsuperscript{20}

The inclusion of DPSs within the definition of species allows particular groups of wildlife to be listed even if the larger taxonomic groups are common or thriving in other geographic areas. Perhaps the most recognizable example of this is the bald eagle. The bald eagle was listed under the Act in the lower forty-eight states, even though there was no taxonomic reason to distinguish those populations from the more abundant and healthy populations in Canada and Alaska.\textsuperscript{21}

It is widely accepted that Congress created the DPS category with the intent to protect groups of wildlife that are threatened or endangered in only certain portions of their species’ range.\textsuperscript{22} In this way Congress could provide protection for certain populations of wildlife, such as the lower forty-eight bald eagle, even if the entire species did not merit protection.\textsuperscript{23}

The definitions of “species,” “subspecies,” and “distinct population segments” under the Act are vague.\textsuperscript{24} Congress never defined “species,” “subspecies,” and “distinct population segment” in the ESA. The terms species and subspecies are used in scientific literature, but the term DPS is purely a creation of Congress. The precise definition of a DPS has

\begin{footnotes}
\item[16] Doremus, \textit{supra} note 10, at 1093–94.
\item[17] \textit{Id}.
\item[19] 16 U.S.C. § 1532. The amendment’s second modification to the definition of “species” is to limit the protection of distinct population segments to vertebrates. The legislative history provides little insight into this change but it does represent a policy preference void of any scientific rationale. See Doremus, \textit{supra} note 10, at 1094.
\item[22] See Rohlf, \textit{supra} note 14, at 631.
\item[23] See Doremus, \textit{supra} note 10, at 1093–94.
\end{footnotes}
generated much controversy because Congress has provided no specific guidance as to the meaning of the term.\textsuperscript{25}

The primary source used to interpret the term is an oft-cited statement made a year after Congress inserted the DPS category into the statute. In 1979 the General Accounting Office (GAO) recommended that Congress eliminate the Services’ ability to list distinct population segments as a “species.”\textsuperscript{26} The GAO released a report contending that the authority to list populations could lead to absurd results such as listing squirrels in a specific city park even though there was an abundance of squirrels living elsewhere.\textsuperscript{27} Rejecting the GAO recommendation, the Senate Committee on the Environment and Public Works explained that it “is aware of the great potential for abuse of this authority and expects the FWS to use the ability to list populations sparingly and only when the biological evidence indicates that such action is warranted.”\textsuperscript{28} With no legislative directive defining the DPS category, this statement from the Senate Committee has become a central principle in the development of the Services’ policy about DPS determinations.\textsuperscript{29}

The Services have made two attempts to define the boundaries of the DPS category since the ESA’s 1978 amendments. First, in 1991 the NMFS developed a policy, limited to Pacific Salmon, which considered whether a salmon population constituted an “evolutionary significant unit” (ESU). An ESU would constitute a DPS under the policy. To qualify as an ESU a salmon population must “(1) be substantially reproductively isolated from other nonspecific population units; and (2) must represent

\textsuperscript{25} Professor Doremus explains:

The term species has a generally understood, albeit fuzzy and to some degree arbitrary, biological significance . . . . While subspecies classification reflects real differences in morphology, genetics, behavior, or geography, the taxonomic significance attributed to those differences is entirely unconstrained by empirical data. ‘Distinct population segment,’ a term not used in the scientific literature, has even less objective significance.

Doremus, supra note 10, at 1100-01.

\textsuperscript{26} U.S. GENERAL ACCOUNTING OFFICE, ENDANGERED SPECIES: A CONTROVERSIAL ISSUE NEEDING RESOLUTION 52-60 (1979).

\textsuperscript{27} Id. at 52; See also Rohlf, supra note 14, at 630.


\textsuperscript{29} Whether a “sparing” use of the power to list distinct population segments is in furtherance of the Secretary’s duty to list any species that otherwise qualifies as endangered or threatened is an unresolved question. See Karl Gleaves et al., The Meaning of “Species” Under the Endangered Species Act, 13 PUB. LAND L. REV. 25, 30 (1992).
an important component in the evolutionary legacy of the species."\(^{30}\) The second attempt was a joint policy of the FWS and NMFS.

II. THE JOINT DPS POLICY PROVIDES FOR A LIMITED CONSIDERATION OF INTERNATIONAL BOUNDARIES IN LISTING DECISIONS

In 1996 the FWS and NMFS developed their first and only joint “Policy Regarding the Recognition of Distinct Vertebrate Population Segments under the Endangered Species Act”.\(^{31}\) Because the NMFS’s ESU policy is applicable only to Pacific Salmon, the joint policy has been the primary focus of DPS listing decisions.

It is not clear why the Services collaborated to develop a policy to guide DPS listings over fifteen years after the term was first included in the Act. One possible explanation is that there was no sense of urgency to develop a policy to guide DPS listings in the 1980s and early 1990s because there was little effort from government and conservation groups to identify DPSs. From 1978 through 1995 there were only twenty-one DPS listings. This number climbed significantly to thirty-nine DPS listings between 1996 and 2000.\(^{32}\) Therefore, the Services decision to promulgate the DPS Policy in 1996 may have been to help environmental organizations successfully petition the Services to list DPSs.\(^{33}\)

A. The Services’ policy defining Distinct Population Segment includes consideration of international boundaries for determining whether a population is discrete

To qualify as a DPS under the 1996 policy, a group must satisfy three requirements: 1) it must be discrete; 2) it must be significant; and 3) if found to be a species it must qualify for listing as threatened or endangered under ESA standards.\(^{34}\) The Services found that a DPS must be both discrete and significant because “[t]he interests of conserving genetic diversity would not be well served by efforts directed at either

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31. DPS Policy, 61 Fed. Reg. 4722. The policy furthers the congressional directives to list only distinct population segments of vertebrate wildlife. It is unclear why Congress excluded plants from constituting distinct population segments. Such a policy decision is contrary to Congress’s mandate that listing decisions rely on “the best available science.”


33. Others have argued that the DPS Policy was in response to the significant climb in DPS listing decisions. Id. at 84.

34. DPS Policy, 61 Fed. Reg. at 4725. The third requirement, though not considered in depth here, raises problems of how to properly determine whether a species is endangered or threatened. See Doremus, supra note 10, at 1087. Nonetheless the first two requirements more often generate disagreements.
well-defined but insignificant units or entities believed to be significant but around which boundaries cannot be recognized.”

A population may be discrete in one of two alternative ways. A population is discrete if it is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Alternatively, a population is discrete if it is delimited by international governmental boundaries within which significant differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist.

A population may be significant for one of four reasons: 1) the population is persistent in an ecological setting unusual for the taxon; 2) the loss of the population would cause a significant gap in the geographical range of the taxon; 3) it is the only surviving natural occurrence of a taxon; and 4) the population differs markedly from other populations of the species in its genetic characteristics.

B. Consideration of international boundaries is in tension with the ESA's strictly science mandate

The Services' decision to consider international boundaries under the “discreteness” prong is a significant break from the NMFS policy regarding pacific salmon. The inclusion of borders has been controversial because the ESA requires that the agencies base their actions “solely” on the best available scientific information. While borders are sometimes coincident with natural boundaries, there are other times where they do not divide a species population at all. In these instances they are only political lines that do not comply with the ESA's strictly science

36. Id. at 4725. The Services explain in the policy that consideration of international boundaries in determining whether a population segment is discrete is sometimes undertaken as a matter of policy rather than science. Id. at 4722.
37. Id. at 4725. It is argued that the DPS Policy is taxon reflexive because a population must be discrete and significant in relation to its larger taxon. In other words, the threshold question when determining a DPS is determining the taxon of the population. If there is scientific uncertainty as to the proper taxonomy of a particular population then the DPS Policy is ineffective. See Derek O. Teaney, The Insignificant Killer Whale: A Case Study of Inherent Flaws in the Wildlife Services' Distinct Population Segment Policy and a Proposed Solution, 34 ENVTL. L. 647 (2004).
38. 16 U.S.C. §§ 1533(b), 1536(c) (2000). As Professor Doremus notes this phrase or a close variant can also be found in a number of the environmental statutes including, the Marine Mammal Protection Act, Pacific Salmon Treaty Act, the Magnuson-Stevens Fishery Conservation and Management Act, and others. See Doremus, supra note 10, at 1034.
mandate. Because of this tension, the inclusion of international boundaries in listing decisions has been criticized.

The ESA's strictly science mandate requires that all listing decisions be made solely on the basis of the best available scientific information. However, this directive has been the subject of much criticism. Notably, Congress's creation of the DPS as a new category was a decision that suggests a congressional policy of protecting wildlife populations even if the entire taxon is not endangered. As mentioned above, the concept of a DPS is a pure creation of Congress and has no scientific basis nor meaning. Therefore, the Services have been given the difficult task of sticking to the strictly science mandate while implementing ambiguous terms based on criteria that are not necessarily scientific, such as international boundaries.

Another example of Congress's injection of nonscientific considerations into the ESA is providing protection to vertebrate population segments but not invertebrate population segments. Because there is no biological reason to distinguish between the two, this distinction is a pure matter of policy. Many critics have pointed out that the Services are in the untenable position of trying to execute a "strictly science" statutory requirement which is at odds with an implicit congressional policy.

C. The ESA must consider international boundaries because it has a domestic focus

Consideration of international boundaries in listing decisions has been a source of controversy. Nevertheless, an examination of the ESA's legislative history clearly shows that the ESA has a domestic focus.

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39. For a response to the argument that international boundaries are inconsistent with the ESA's strictly science mandate see Doremus, supra note 10, at 1095 (the strictly science mandate does not explicitly apply to the agencies identification of species).
40. Geoffroy & Doyle, supra note 32, at 83.
41. The strictly science mandate is not defined in the ESA or in its legislative history. Doremus, supra note 10, at 1033–34.
42. Doremus, supra note 10, at 1032; see also Rohlf, supra note 14, at 625.
43. Rohlf, supra note 14, at 625.
45. Rohlf, supra note 14, at 624.
46. Doremus, supra note 10, at 1056.
47. See Geoffroy & Doyle, supra note 32. Most notably, consideration of boundaries has been labeled inconsistent with the mandate that listing decisions must satisfy the best-science standard. This is acknowledged by the DPS Policy itself. "The Services recognize that the use of international boundaries as a measure of discreteness may introduce an artificial and non-biological element to the recognition of DPS's." DPS Policy, 61 Fed. Reg. 4722, 4723 (Feb. 7, 1996).
in conservation efforts. Therefore, considering international boundaries when they delimit U.S. and foreign populations is appropriate.\textsuperscript{48}

As mentioned above, the ESA constituted a shift away from previous federal endangered species legislation, which only protected species facing "worldwide extinction."\textsuperscript{49} The definition of "species" under the MMPA was the first step in the shift toward focusing on the conservation of domestic populations. The MMPA specifically included subpopulations of wildlife under the definition in order to ensure the protection of Alaskan polar bears.\textsuperscript{50}

An examination of the ESA's statutory text itself also shows an underlying domestic focus. For example, the Act notes that "various species of fish, wildlife, and plants in the \textit{United States} have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation."\textsuperscript{51} It also explains that in enacting the ESA, Congress intended to better safeguard "the \textit{Nation}'s heritage in fish, wildlife, and plants."\textsuperscript{52} More directly, the House Report accompanying the ESA specifies that a species may be "endangered within the United States where its principal range is in another country, such as Canada or Mexico, and members of that species are only found in this country insofar as they exist on the periphery of their range."\textsuperscript{53}

Congress's intent to focus on the conservation of domestic populations is perhaps most clearly articulated in its response to the GAO's recommendation that the FWS be prevented from listing geographically limited populations of wildlife. Congress explained that "the U.S. population of an animal should not necessarily be permitted to become extinct simply because the animal is more abundant elsewhere in the world."\textsuperscript{54} Although Congress did not clarify under what circumstance it would permit a domestic population to become extinct if the foreign populations were abundant, it at least intended to give heightened consideration and protection to endangered domestic populations. The significance of domestic populations in the Act requires that international boundaries be considered in DPS determinations.

\textsuperscript{48} Rohlf, \textit{supra} note 14, at 628.  
\textsuperscript{49} Id.; see also Defenders of Wildlife v. Norton, 258 F.3d 1136 (9th Cir. 2001).  
\textsuperscript{50} Doremus, \textit{supra} note 10, at 1093-94.  
III. THE FWS LISTED THE CACTUS FERRUGINOUS PYGMY-OWL AS ENDANGERED, PARTLY BECAUSE OF INTERNATIONAL BOUNDARIES

The tensions between the ESA's strictly science mandate and the consideration of international boundaries manifested themselves in the case of the cactus ferruginous pygmy-owl (CFPO).

A. The Mexican border bisects the western range of the pygmy-owl

One of four subspecies of the ferruginous pygmy-owl, the CFPO has historically occupied areas around southern Arizona, from about thirty-five miles north of Phoenix down through the western Mexican states of Colima and Michoacan. This constitutes the CFPO's western range. In the east, the owl has been found from the lower Rio Grande and costal plains of southern Texas south along the Laguna Madre coast until the eastern Mexican states of Coahuila and Nuevo Leon. The Arizona population is the northernmost segment of the western pygmy-owl's range and the Texas population is northernmost segment of the eastern pygmy-owl's range. In other words, the U.S. populations constitute only a small portion of the CFPO's range.

Mountains and highlands extend north and south between the east and west populations. Because of the owl's penchant to remain at low elevations, the mountains and highlands form a large natural border dividing the eastern and western ranges into two distinct taxa. In fact, the owl has never been found in a 500-mile wide gap between the Texas and Arizona populations, a gap comprising mountains ranges and the Chihuahuan Desert. In Mexico, the eastern and western populations are isolated from each other by the highlands of the Sierra Madre and the Mexican Plateau. The international border cuts across the northern edge of the western pygmy-owl, and thus leaves a small portion of the western pygmy-owl's range in the United States.

According to the FWS's listing decision, the Arizona population has declined precipitously. While precise population size numbers are not available, one study described the Arizona population as "quite common" around the year 1900, and in the mid-1900s as "not uncommon," "of common occurrence," and "fairly numerous."

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55. CFPO Ruling, 62 Fed. Reg. 10,730 (Mar. 10, 1997). Pygmy-owls are approximately seventeen centimeters long, have longer tails than most owls, are reddish-brown with a cream colored belly, and have a crown that is lightly streaked. They are ferocious predators of birds and small mammals.

56. Id. The ferruginous pygmy-owl can be found from southern areas of the western United States all the way until Panama.

57. See id. at 10,730-32 for a description of the owl's habitat.

58. Id.

59. Id. at 10,731-32.

60. Id. at 10,731.
However, by 1988 the owl’s scarcity made estimates of population size difficult to determine. In a state-wide survey of all bird populations in Arizona that year, the pygmy-owl was not even listed. A few years later, in a more determined effort, researchers documented a total of nineteen birds in the entire state. In 1997, the Service concluded that the decline of the owl was likely the result of habitat destruction and degradation since it is currently estimated that between eighty-five and ninety percent of riparian lowland forests and woodlands in the southwestern United States have been modified or lost.

B. Why the FWS thought the Arizona pygmy-owl merited protection as a DPS

On May 26, 1992, conservation organizations petitioned the FWS to list the CFPO as endangered. By 1994 FWS had published a proposed rule to list the CFPO as endangered in Arizona (the U.S. population of the western range). In 1997, after receiving and reviewing comments in response to the proposed listing, the FWS determined that the Arizona population was on the verge of extirpation. On March 10, 1997, the FWS found that the Arizona population of the CFPO constituted a DPS and should be listed as endangered.

As noted above, in order to find that the owl constituted a DPS the FWS needed to show that the Arizona pygmy-owl was “discrete” and “significant” in relation to the taxon to which it belongs. The FWS found that the eastern and western populations of the owl constituted different taxa from one another. Therefore, in order to find that the Arizona population is a DPS, the FWS needed to show that the Arizona pygmy-owls were “discrete” and “significant” in relation to the remainder of its taxon, the pygmy-owl population in western Mexico.

In what came to haunt the FWS in litigation, the listing decision to protect the Arizona pygmy-owl included only a basic survey of the status of the pygmy-owl in western Mexico. In fact, throughout the entire decision the FWS devoted only three paragraphs to the western Mexico population. The main information the agency provided was that “the pygmy-owl is now rare or absent in northern Sonora, within 241 km (150

61. See id.
62. Id. at 10,741.
63. Id.
65. Id. at 3.
66. Id. at 3–4.
mi) of the United States-Mexico border." As in Arizona, the FWS found that the owl’s continuing decline in northern Sonora is largely the result of conversion of the owl’s natural habitat and extensive urban and agricultural developments.

C. The FWS failed to support its listing decision properly

The FWS’s failure to investigate the western Mexico population thoroughly was a substantial omission under the DPS Policy. The policy’s “discrete” and “significant” factors, and hence the decision to list the Arizona population, could be supported only through an examination of the larger western Mexico population. First, to find a population discrete because it is delimited by international boundaries, it is necessary to examine the “conservation status” of the foreign population, the western Mexico pygmy-owls. Second, under the “significant” prong, a population must be found significant in relation to the taxon to which it belongs, which includes the western Mexico pygmy-owls.

The FWS, however, spent most of its effort distinguishing the eastern and western populations from one another rather than arguing that the Arizona segment of the western population constituted a DPS in its own right. For example, responding in the comment section of the listing decision to the claim that “the Service did not support its determination that the Arizona, Texas, eastern Mexico, and western Mexico populations of pygmy-owls meet the definition of discrete populations,” the Service explained only that the Arizona population was distinct from the Texas population. Despite the specific query regarding whether the western Mexico population was distinct, the service made no mention of that population in its response. Given the fact that all parties to the litigation conceded that the eastern and western populations were distinct and significant from one another, the focus on the eastern population was clearly misplaced. As a result the FWS did not sufficiently explain why it found the Arizona population a DPS.

A significant problem with the FWS position was that its primary argument that the Arizona population constituted a DPS was based on a
policy determination rather than an examination of whether the Arizona pygmy-owl was "discrete" and "significant" in relation to the western Mexican population. In the listing decision and in briefs to the court, the FWS argued that the risk of extirpation from the United States made the owl significant because it deprived the United States of its only portion of the western pygmy-owl's range. The agency essentially argued that the Arizona pygmy-owl should be listed regardless of the fact that it may not be "significant" in relation to the rest of the taxon, the population in western Mexico. Though this is a compelling policy argument, it is not consistent with the FWS's own DPS Policy. As noted above, the FWS policy allows the agency to consider international borders to satisfy the "discreteness" prong of the DPS Policy, but it cannot have an affect on the "significance" prong. The agency mistakenly permitted international boundaries into its analysis of the "significance" prong, without considering the specific criteria required by the DPS Policy.

What is also interesting about the FWS's decision to base its listing determination on considerations that are impermissible under the DPS Policy is that relying on those considerations was unnecessary. Based on the facts in the listing decision, the FWS could have fashioned an argument that was consistent with the DPS Policy and likely to have been upheld by the Ninth Circuit. As noted above, one way the "significance" prong can be satisfied is if it can be shown that the "loss of the discrete population segment would result in a significant gap in the range of a taxon." The DPS Policy intended that the term "significant" have the commonly understood meaning of "important." Following the Ninth Circuit's ruling, a gap is significant if the loss of the geographic area amounts to a substantial reduction of a taxon's range.

To survive judicial review of its decision under the "arbitrary and capricious" standard, the FWS could have shown that a loss of the Arizona population would result in a significant gap in the taxon's range and that its listing as a DPS was reasonable. For example, the listing decision found that the owl is rare or absent not only in Arizona, but also south into Mexico, one hundred and fifty miles past the U.S. border. Adding this foreign area to the domestic area where the endangered Arizona population lives, the total area experiencing a declining western pygmy-owl population extends over three hundred miles of its historic range. Further, as the FWS noted in the listing decision, the owl is non-migratory and therefore it is unlikely that the Arizona segment mixes

78. Brief for Intervenors-Appellees at 11, Home Builders, 340 F.3d 835 (No. 02-15212).
80. Id. at 4723.
81. Home Builders, 340 F.3d at 847.
with the western Mexico segment.\textsuperscript{83} Though not flawless, this argument should have been sufficient to satisfy the “significant gap” factor under the “significance” requirement. At least, it seems to satisfy the “arbitrary and capricious” standard the court applies in litigation.

In the listing decision, FWS mistakenly did not attempt to argue that the Arizona pygmy-owl was “significant” to its taxon. Instead, it defended its position solely on the basis that the owl should be protected lest the United States lose its last population of western pygmy-owls. This was in clear violation of the DPS Policy. It is unclear why the FWS decided to list the Arizona-owl based on considerations that were not consistent with its own DPS Policy. It is hard to imagine that the service was not aware of the taxon reflexive nature of the DPS Policy – which requires that a population is “discrete” and “significant” only in relation to its larger taxon. Even more interesting is that the FWS could have constructed a listing decision that conformed to the DPS Policy by showing that a “significant gap” would occur if the Arizona population was lost. Instead, the FWS focused on the relationship between the Arizona and Texas populations. The Ninth Circuit identified this misapplication of the DPS Policy and reversed the listing decision.\textsuperscript{84}

\textbf{IV. HOME BUILDERS V. NORTON}

Home Builders challenged the FWS listing decision. In court the parties stipulated that the eastern and western pygmy-owl populations each constituted a DPS.\textsuperscript{85} Home Builders acknowledged that the Arizona population was endangered, but aimed their complaint at the population’s listing as a DPS.\textsuperscript{86} The district court granted summary judgment to the FWS.\textsuperscript{87} It held that the decision to divide the western population into two DPS’s was permissible.\textsuperscript{88} Home Builders appealed the decision.

The Ninth Circuit properly found that the FWS position was inconsistent with its own DPS Policy. It held that consideration of the international boundaries in this case helped satisfy the “discreteness” prong of the DPS Policy but could not be factored into the “significance” prong. As a result, the court reversed the FWS decision to list the Arizona population.\textsuperscript{89} The Ninth Circuit held that the FWS listing

\begin{itemize}
  \item \textsuperscript{83} Id.
  \item \textsuperscript{84} Home Builders, 340 F.3d at 852.
  \item \textsuperscript{85} "Home Builders do not contest the designation of the eastern and western pygmy-owls as DPSs." Id. at 835.
  \item \textsuperscript{86} Id.
  \item \textsuperscript{87} Nat’l Ass’n of Home Builders v. Norton, No. 00-CV-903 (D. Ariz. Sept. 21, 2001).
  \item \textsuperscript{88} Id.
  \item \textsuperscript{89} Home Builders, 340 F.3d at 852.
\end{itemize}
decision satisfied the discreteness prong, but failed the significance prong as contrary to the Agency's own policy.

A. The court found that the Arizona population satisfied the discreteness prong of the DPS Policy

Under the ESA, a population may be discrete if it is delimited by an international boundary and a significant difference in "conservation status" exists on each side of the boundary. Since the two western pygmy-owl populations were delimited by international boundaries, the crucial question was how "conservation status" should be defined. In litigation, the FWS argued that "differences in conservation status means differences in the number of owls on either side of the border." If this is true, then the agency need only show that there were a different number of pygmy-owls on each side of the international boundary in order to satisfy the "discreteness" prong.

The court deferred to the FWS's argument that a difference in "conservation status" existed for two reasons. First, the FWS had used the term "conservation status" in a similar way in previous listing decisions. Therefore the interpretation was not a post hoc rationalization. Second, the FWS noted in its listing decision that "pygmy-owls were abundant in parts of northwestern Mexico but were rare and declining in Arizona." It is surprising that the court upheld the FWS's argument in support of the "discreteness" prong. The Ninth Circuit's reasoning was questionable. It is hard to imagine two populations on different sides of an international boundary that would not have different population sizes. If a difference in population size were the standard, then it would nearly always be possible to satisfy the discreteness prong. A higher standard, such as the need to show the existence of differing conservation efforts coupled with a substantial difference in populations seems better suited to meet the policy goals of protecting domestic populations.

90. Conservation status is used in this note to include control of exploitation, management of habitat, or regulatory mechanisms. There are factors listed in the DPS Policy that should be considered in determining if a population delimited by international boundaries is "discrete." DPS Policy, 61 Fed. Reg. 4722, 4725 (Feb. 7, 1996).
91. Home Builders, 340 F.3d at 843 (internal quotes omitted).
92. Id.
93. Id at 844. By deferring to the FWS's determination that there was a significant difference in the conservation status between the two populations, the court set an unreasonably low standard.
B. The FWS did not satisfy the significance prong of the DPS Policy

The court found that the FWS did not satisfy the "significance" prong of the DPS Policy despite finding that the Arizona pygmy-owl was discrete from the population in western Mexico.\textsuperscript{94} The FWS's "significance" showing was based upon the fact that the United States would lose its only domestic population of a species if the Arizona pygmy-owl disappeared.\textsuperscript{95} Finding this position inconsistent with the DPS Policy, the court explained:

[The FWS must find that a discrete population is significant to its taxon as a whole, not to the United States. Extirpation of the western-pygmy owl from the United States is certainly significant to the United States, but that does not mean that the loss of the Arizona pygmy-owl population is significant to its taxon.\textsuperscript{96}]

The FWS argument that the Arizona pygmy-owl was significant because it was the only population of its species within the U.S. borders contravened the requirement under the DPS Policy that international boundaries be considered only under the "discreteness" prong. Specifically, once a segment is found discrete, the policy explains that "its biological and ecological significance will then be considered.... In carrying out this examination, the Services will consider available scientific evidence of the discrete population segment's importance to the taxon to which it belongs."\textsuperscript{97} The "significance" prong does not permit the consideration of nonscientific factors. The directive under the "discreteness" prong, on the other hand, does not require that decisions be based on scientific evidence alone.\textsuperscript{98}

The FWS responded to this criticism with the argument that the "significance" prong can be satisfied on the basis of nonscientific evidence. As the FWS wrote in its brief to the court, "[w]hile the ESA requires that listing decisions shall be based on biological considerations... neither the Act, regulations, or DPS Policy apply those requirements to the process of defining a DPS."\textsuperscript{99} Although the joint DPS policy has long mandated that the significance prong be satisfied on the basis of "biological and ecological" concerns, the FWS here argued that it should be permitted to deviate from that policy and consider

\textsuperscript{94} Id. at 852.
\textsuperscript{95} CFPO Ruling, 62 Fed. Reg. 10,730, 10,737 (Mar. 10, 1997) (the FWS argued "should the loss of either the Arizona or Texas populations occur, the remaining population would not fill the resulting gap as the remaining population would be genetically or morphologically identical... ").
\textsuperscript{96} Home Builders, 340 F.3d at 849 (citations omitted).
\textsuperscript{98} Id.
\textsuperscript{99} Answering Brief for the Federal Appellees at 12-13, Home Builders, 340 F.3d 835 (No. 02-15212).
non-scientific factors under the “significance” prong. Such a position would have been a drastic deviation from the current DPS Policy.

Finally, the court rebuffed the agency’s attempt to broaden its defense after litigation commenced. In its brief to the court, the FWS argued the Arizona pygmy-owl was significant not only because extirpation from the United States in itself makes the owl significant, but also because a loss would create a significant gap in its taxon. The FWS argued that a loss would decrease the genetic variability of the taxon and reduce the historic range of the population. The most obvious problem with this argument, as the court noted, was that it had no support in the administrative record of the listing decision. Although the court explained that an agency decision should be upheld if there is a rational connection between the facts and the choice made, this showing is limited to the evidence that is contained in the administrative record. In other words, the court will not accept any post hoc rationalizations made in litigation. If FWS had made this argument as a part of the listing decision, rather than solely in its brief to the court, the agency would have used reasonable scientific evidence and the court would likely have upheld the listing.

V. INTERNATIONAL BOUNDARIES SHOULD PLAY A MORE IMPORTANT ROLE IN LISTING DECISIONS

It is clear that the FWS acted inconsistently with its own DPS Policy. The agency, however, correctly concluded that in some circumstances the fact that a population of wildlife constitutes the sole remaining domestic population should affect both the “discreteness” prong and the “significance” prong of a DPS listing decision. This conclusion was too late, however, had not yet become agency policy, and was a post hoc rationalization that would not be recognized by the courts.

A. International boundaries are meaningless under the current DPS Policy if the agency does not satisfy the “significance” prong

Although the current DPS Policy properly considers international boundaries in listing decisions, it does not accord sufficient importance to international boundaries in DPS determinations. Currently, the sole remaining domestic population will satisfy the “discreteness” prong so long as a difference in “conservation status” can be shown. However, in order to be listed under the EPA, this domestic population must also be “significant” under the DPS Policy. As a result, the fact that a population

100. Id. at 16–18.
101. Id.
102. Home Builders, 340 F.3d at 846.
103. Id.
is within the United States or is the last remaining domestic population becomes meaningless if it cannot be shown to be “significant” to the larger taxon.

This is precisely the reason the Arizona pygmy-owl’s listing decision was overturned by the Ninth Circuit. The fact that the Arizona pygmy-owl was the sole remaining domestic population of its species helped to satisfy the discreteness prong of the DPS Policy but FWS incorrectly used that fact as the sole criteria for satisfying the “significance” prong. Because of the ESA’s domestic orientation, it should be enough to achieve protection under the Act if a population is the sole remaining domestic population regardless of whether the population can be shown to be “significant” to its larger taxon.

B. The policy goals behind the “significance” prong support the consideration of international boundaries in listing decisions

The consideration of international boundaries under the “significance” prong is also consistent with the policy goals behind the “significance” test of the DPS Policy. As discussed above, the agencies included a “significance” prong in order to distinguish those discrete populations in the United States which are valuable under the ESA from those that are not, such as distinct populations of squirrels in New York City parks. In response to this concern, Congress instructed the agencies to list distinct populations “sparingly” and the services implemented this directive by requiring a DPS to satisfy a “significance” test. Although it is desirable that a discrete population be found significant in order to be listed, by not considering international boundaries the DPS Policy’s “significance” test does not wisely implement the “sparingly” directive.

Congress enacted the ESA to protect certain domestic populations of wildlife, but the DPS Policy only takes into account the group’s significance to its own species. As a result, the policy ignores an important way in which a population segment might further the values the ESA aims to protect. Those values include preserving endangered domestic populations of species regardless of whether they are significant to their taxon. In other words, because the protection of domestic

104. See Teaney, supra note 37 (attacking the Service’s decision to declare a killer whale population insignificant even though it was the sole remaining domestic population of this particular species of whale).
105. See supra Part I(A).
107. Teaney, supra note 37, at 694–95 (arguing that a population’s significance is desirable but should be measured in relation to its ecosystem and to human culture).
108. Doremus, supra note 10, at 1107.
populations is a central focus of the ESA, finding that a population is the sole remaining U.S. population of a species should be sufficient to satisfy the “significance” prong as well as Congress’s mandate to list DPS’s “sparingly.”

C. The inherent limitations of national legislation also support a greater role for international boundaries in listing decisions

The DPS Policy also undervalues the role of international boundaries with respect to the ESA’s purpose of conserving endangered and threatened species. The ESA confers authority to regulate only domestic populations of wildlife. Although this may seem an obvious point, it has not been properly considered by the FWS and NMFS. As national legislation, the ESA can only ensure the conservation of endangered or threatened species within U.S. territory. As a result endangered populations within U.S. borders should receive greater consideration for protection under the ESA than endangered populations outside the United States. Although this is a nonscientific policy position, it is in line with the ESA’s domestic focus.

In upholding the FWS’s decision to list the Arizona pygmy-owl as a DPS, the Home Builders district court recognized that the ESA’s power to protect species is focused on and implicitly limited to the domestic populations of these species. The court explained that “[b]ecause of the international border, the Arizona segment... is the only population segment over which the United States Government could affect protection and recovery for the species.” Since the ESA can only ensure the protection of domestic populations, the FWS and NMFS should carefully look after any endangered or threatened U.S. population segments in order to fulfill the ESA’s mandate to protect and conserve endangered and threatened species. Further, when a population constitutes the last remaining U.S. population of a species, protection should be even more seriously considered.

In defense of why international boundaries are factored into the “discreteness” prong of listing decisions, the current DPS Policy recognizes that the scope of the ESA’s regulatory authority is limited to domestic populations:

[I]t appears to be reasonable for national legislation, which has its principal effects on a national scale, to recognize units delimited by international boundaries when these coincide with differences in the management, status, or exploitation of a species.... Recognition of other political boundaries, such as State lines within the United

109. Id. at 1130–31.
States, would appear to lead to the recognition of entities that are primarily of conservation interest at the State and local level, and inappropriate as a focus for a national program.\footnote{112}{DPS Policy, 61 Fed. Reg. 4722, 4723-24 (Feb. 7, 1996).}

As the FWS and NMFS point out, domestic wildlife should be given special consideration because the ESA can only fully protect domestic populations. The current policy, though, does not give domestic populations sufficient protection.

This problem is highlighted when applied to a species endangered in the United States but where the status of the foreign population is unclear or undeterminable. Under the current policy, if the FWS cannot show that the U.S. population is "significant" under the DPS test, the FWS has no authority to protect the U.S. population and, therefore, cannot ensure the preservation of at least a segment of the species. For instance, if the natural boundaries and distribution are like those in \textit{Home Builders v. Norton}, the agency may be hard pressed to show that the U.S. population is "significant" in relation to its taxon. Because the U.S. population of the pygmy-owl constitutes the periphery of its taxon's range it may not qualify as significant. As noted above, the FWS could likely have augmented the Arizona segments significance by noting the endangered status of the western Mexico population in the northern Sonora.\footnote{113}{See supra Part III(C).} However, if the health of the population in northern Sonora were inconclusive then it would be difficult to show that the Arizona population, as a mere peripheral segment of the western pygmy-owl, is "significant" in relation to the entire taxon.

As such, the current DPS Policy prevents the Services from ensuring the protection of the U.S. portion of the species. If protection of the U.S. population is unavailable under the DPS Policy, and if the U.S. segment of the species disappears, protection of the species would solely depend on the efforts and regulations made by the country in which the foreign population is found. In the absence of further legislation, without a domestic population, Congress would lose altogether its ability to ensure the conservation of an endangered or threatened species.

Extrapolate, for instance, to the Arizona pygmy-owl. Now that the FWS does not have the authority under the current DPS Policy to list the Arizona population, all conservation efforts to help protect the species must be made by the Mexican government. Once the Arizona population is extirpated, the survival of the species will rest entirely on conservation efforts in Mexico.

In some circumstances, most notably when the foreign population is healthy and sufficiently protected through conservation efforts, Congress would likely be more amenable to a determination that the domestic
population is not a DPS. This is because even if the species is no longer found within the United States, Congress can be confident that it will not be extirpated throughout its entire range. If, however, the foreign population is not protected sufficiently, it becomes more important that the ESA ensure the survival of the domestic population. Though the Arizona pygmy-owl's U.S. population may be only be at the periphery of the species' range, and therefore insignificant under the DPS Policy, if it is determined that the conservation efforts for the owl in western Mexico are insufficient, the Arizona pygmy-owl should be listed.

D. The agencies' broad discretion to consider international boundaries has led to inconsistent implementation

The current DPS Policy is also flawed because it gives FWS and NMFS excessive discretion in determining when international boundaries should be factored into the discreteness prong of the policy. As the policy stands, the FWS and NMFS use international boundaries both to support and oppose listing decisions without a clear explanation of when these boundaries should help or hinder listing decisions. As a result, the application of international borders has been inconsistent.

For example, in Home Builders v. Norton, the FWS focused on the depletion of the Arizona pygmy-owl but only briefly considered the status of the western Mexican population. The FWS ignored the fact that the western pygmy-owl is quite healthy and abundant in the middle and in the south of its range. Instead, the agency focused on the endangered status of the domestic population. Furthermore, the agency wrote only one sentence in support of its position that the international boundary should satisfy the discreteness prong: “[T]he Service believes the status of the species in Arizona is different from that in Sonora, with records currently indicating a higher number of individuals in Sonora....” Based on this low threshold for demonstrating discreteness, the Ninth Circuit nonetheless upheld the agency's conclusion. It relied on past listing decisions where FWS had considered differences in “conservation status” to mean differences in the number of owls on either side of the border. With such a low standard to fulfill, the agency could successfully argue that any U.S. population is discrete from its foreign population simply by showing a difference in the size of the population.

In other decisions, the FWS and NMFS again ignored the healthy status of a species outside of the United States. For instance, the FWS concluded that the grizzly bear population in Idaho, Washington and

115. Id. at 17037.
Montana constituted a DPS even when the species' population in Canada was extremely healthy.\textsuperscript{117} In making this determination, the agency did not even refer to the foreign population but rather focused on the status of the domestic population.\textsuperscript{118}

In other cases, however, the FWS has taken the opposite position and focused on the foreign segment in order to show that the U.S. population did not deserve protection. One notable example is the FWS's decision not to list the Pacific fisher in the western U.S.\textsuperscript{119} Even though the U.S. population had been substantially depleted, the agency noted the "relative abundance" of the Pacific fisher in eastern Canada and "the continuity of the fisher's range through Canada, and between Canada and the United States" in order to determine that the U.S. population was not distinct.\textsuperscript{120} In fact, near the end of the listing decision the FWS noted that while international boundaries can delimit populations,

\[\text{[i]n the case of the fisher, the petition did not provide sufficient information concerning the control of exploitation, management of habitat, conservation status or regulatory mechanisms in Canada to allow the Service to make a determination of the appropriateness of delimiting the western United States population of the fisher based on international boundary between Canada and the United States.}\textsuperscript{121}

Compared to the decision to list the Arizona pygmy-owl, it is unclear why the international boundary did not make the U.S. population of the fisher discrete from the Canadian population. Surely it is inconsistent to reject the petition to list the Pacific fisher because of a dearth of information regarding conservation efforts, but then to find that the Arizona pygmy-owl is "discrete" simply because there were a different number of owls on each side of the border. The FWS could have argued that international boundaries made the U.S. population of the fisher discrete and thus supported a listing decision. Instead, the agency minimized the importance of the border and focused on the healthy population in Canada to oppose a listing.

Another example of this inconsistency was the FWS's decision not to list the U.S. population of the Canadian lynx as endangered.\textsuperscript{122} Although

\begin{itemize}
  \item \textsuperscript{118} \textit{Id.}
  \item \textsuperscript{120} \textit{Id.} at 8017.
  \item \textsuperscript{121} \textit{Id.}
\end{itemize}
the agency acknowledged the species' dramatic decline in the contiguous forty-eight states, it argued that the U.S. population should not be listed because the lynx remains plentiful in Canada, and it is not threatened with the possibility of extinction in those areas.\textsuperscript{123} Again, it is not clear why the agency chose to focus on the healthy populations across the border when it could have used the endangered domestic population to support a DPS determination. Once again, the discreteness prong could have been satisfied following the low standard set in the Arizona pygmy-owl listing decision. In fact, when the decision against listing the lynx was appealed, the court noted and criticized the FWS's consideration of international boundaries as inconsistent with past FWS decisions listing domestic populations of the bald eagle, gray wolf, and grizzly bear, when those species were considered abundant and healthy in Canada.\textsuperscript{124}

\textbf{E. A new approach to the DPS Policy: Close examination of the conservation status of the foreign population}

At least under some circumstances, the sole remaining U.S. population of a species ought to be protected even if it cannot qualify as "significant" under the existing DPS Policy. The question is when this should be the case. The answer should turn on the conservation status of the foreign population. Currently DPS Policy provides that the discreteness prong is satisfied if a species is delimited by international boundaries "within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms" occur across the border. The Services were right to focus on conservation status, but have incorrectly considered how differences in conservation status should factor into listing decisions.

When the U.S. population is the sole remaining domestic population of a species, significant differences in conservation status across the international boundary should satisfy both the discreteness prong and the significance prong if the agency determines that the foreign population is poorly protected. The protection of the U.S. population of a species becomes more important to the survival of the species when the foreign population is inadequately protected. On the other hand, if the foreign population is sufficiently protected and is found to be healthy and abundant, then protection of the U.S. population is less significant to survival of the species. Therefore, finding that the foreign population is

\textsuperscript{123} Id. at 66, 508.

\textsuperscript{124} Defenders of Wildlife v. Babbitt, 958 F. Supp. 670, 685 (D.D.C. 1997). The court quoted an internal FWS memorandum stating that "If we are going to list the grizzly, wolf, and eagle, and to continue to protect species in their United States jurisdiction, we must also judge the need to list the lynx on the same basis."
healthy and sufficiently conserved should not weigh in favor of protecting the domestic population.

If the FWS and NMFS were to implement such a policy, they would need to complete, in each listing determination, a full and thorough examination of the conservation status of the foreign population. The Services should look not only at the present status of the foreign population but also anticipate the status of the species in the future. Once the domestic population is extirpated, the ESA will no longer have the power to preserve the species. In the event that the FWS and NMFS permit the extirpation of a domestic population of species, they should be confident that the species would be protected in the long run because of the existence of a healthy and protected population outside of the United States.

The Services should also err on the side of preservation in the face of an uncertain conservation status for the foreign population. If an agency does not or cannot sufficiently examine the conservation status of the foreign population, then there should be strong incentives to protect the sole remaining U.S. population. The presumption should be that the foreign population is insufficiently protected and that conservation of the U.S. population is crucial to the survival of the species.

It is not completely clear how this approach would affect the status of the Arizona pygmy-owl. The record of the listing decision did not include a thorough examination of the status and health of the population in western Mexico and therefore cannot speak to the importance of the Arizona population to the preservation of the species. Without a thorough review, however, the presumption should be to provide the sole remaining U.S. population of the western pygmy-owl protection under the ESA.

CONCLUSION

The outcome of Home Builders v. Norton highlights a flaw in the regulations that govern endangered species listings. The case demonstrates that while the joint FWS and NMFS DPS Policy correctly identifies international boundaries as a factor in DPS decisions, it does not do enough to protect domestic populations of wildlife. Because international boundaries have a role only under the discreteness prong of the test, their presence does little to validate the listing of domestic populations unless they are "significant" for other reasons. Therefore the international boundary was sufficient to show that the Arizona pygmy-owl was discrete from its taxon, but could not show that the pygmy-owl was significant in relation to its taxon. As a result many populations deemed not "significant" will be extirpated from the United States even if the foreign population is not adequately protected. To remedy this, the
FWS and NMFS should implement a policy that is more apt to protect domestic populations of species, particularly when a segment is the last remaining domestic population. International boundaries should be considered under both the "discrete" and "significant" prongs. When the population outside the United States is poorly protected the FWS and NMFS should protect an endangered population if it is the sole remaining domestic population. This will ensure the conservation of the domestic population of the endangered species. It will also provide more consistent guidance for the FWS and NMFS to determine how to factor international boundaries into listing decisions.