

# Petition to Reclassify Gray Wolves as Threatened in the Conterminous United States Under the Endangered Species Act

January 27, 2015



The Humane Society of the United States ■ Center for Biological Diversity  
The Fund for Animals ■ Born Free USA ■ Friends of Animals and Their Environment  
Help Our Wolves Live ■ Detroit Zoological Society ■ Midwest Environmental Advocates  
Predator Defense ■ National Wolfwatcher Coalition ■ Northwoods Alliance  
Wisconsin Federated Humane Societies ■ Minnesota Humane Society ■ Howling for Wolves  
Detroit Audubon Society ■ Sault Sainte Marie Tribe of Chippewa Indians  
Wildlife Public Trust and Coexistence ■ Minnesota Voters for Animal Protection  
Friends of the Wisconsin Wolf ■ Wolves of Douglas County Wisconsin  
Justice for Wolves ■ Wildwoods (Minnesota)

January 27, 2015

Sally Jewell, Secretary  
U.S. Department of the Interior  
Daniel Ashe, Director  
U.S. Fish and Wildlife Service  
1849 C Street NW  
Washington, DC 20240

Dear Secretary Jewell and Director Ashe:

Pursuant to 16 U.S.C. § 1533(b)(3) of the Endangered Species Act (“ESA”), section 5 U.S.C. § 553 of the Administrative Procedure Act (“APA”), and 50 C.F.R. § 424.14, the undersigned organizations hereby petition the U.S. Department of the Interior (“DOI”), and the U.S. Fish and Wildlife Service (“Service” or “FWS”), to reclassify the gray wolf (*Canis lupus*), excluding the Mexican wolf subspecies (*Canis lupus baileyi*),<sup>1</sup> as threatened throughout the conterminous United States.

In 1978, wolves were reduced to just two populations in the conterminous United States, one in northeastern Minnesota, and one very small population in Isle Royale National Park. The Minnesota population was estimated to be approximately 1,235 wolves, and was found in the far northeast portion of Minnesota. At that time, the Service protected the gray wolf at the full species level in the conterminous United States as an endangered species and designated the Minnesota population as threatened.<sup>2</sup> Today, there are several populations of gray wolves in the conterminous United States, and the total population of wolves numbers approximately 5,000 individuals. While this represents a considerable improvement in the status of the gray wolf, most wolf populations are still below what scientists have identified as the minimum viable population size necessary to maintain long-term genetic viability and avoid extinction. Furthermore, even today, the gray wolf occupies as little as 5 percent of its historic range. Although many areas that wolves once inhabited no longer contain suitable habitat, large tracts of unoccupied, suitable habitat still exists in the Pacific Northwest, California, the southern Rocky Mountains, the Dakotas, New England and possibly elsewhere. In total, approximately 360,000 square miles—70 percent of identified suitable wolf habitat—still remains unoccupied. Accordingly, the best available science indicates that the gray wolf is threatened throughout a significant portion of its range.

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<sup>1</sup> This petition excludes Mexican wolves based on the Service’s recently finalized listing of the Mexican wolf as a separate endangered subspecies. 80 Fed. Reg. 2488-01 (Jan. 16, 2015)).

<sup>2</sup> 43 Fed. Reg. 9607 (Mar. 9, 1978). Although the Service concluded that the Minnesota population represented the “eastern timber wolf” subspecies (*Canis lupus lycaon*), it nonetheless designated the Minnesota population at only the species level. Because the authority to list species as “distinct population segments” did not exist at the time of this action, the authority for the original split-species classification has remained unclear.

Moreover, threats to full recovery of the species remain inadequately addressed in both occupied and unoccupied portions of the range. In particular, the threat of inadequately controlled human-caused mortality does not permit full delisting at this time. Our past persecution of this species should serve as a cautionary tale in our efforts to fully recover the species. Yet several states have made no secret of their intentions to dramatically reduce wolf numbers and stifle expansion of wolf range, preventing continued recovery. Overutilization and the inadequacy of state regulatory mechanisms in both occupied and unoccupied areas remain current threats to the species that cannot be ignored.

The reclassification of gray wolves to threatened status is warranted at this time because of the differing conservation status among wolf populations in different portions of the species' range. The gray wolf has not yet been restored throughout a significant portion of its range, and although progress has been made toward recovery of the species in some areas, substantial threats to the species remain within and outside of the areas currently occupied by wolves. Delisting the wolf range-wide when it remains absent from large portions of its range and continues to face many threats fails to follow the best available science and has been repeatedly rejected by federal courts. A threatened listing would continue needed federal oversight of wolf recovery efforts while providing the Service with the regulatory flexibility to work with state and local wildlife officials to appropriately manage conflicts with wolves, and while maintaining ESA protections in areas where wolf recovery remains in its infancy.

This petition represents an independent regulatory action under Section 4(b)(3) of the Endangered Species Act, and must be responded to within 90 days of receipt of this petition to the maximum extent practicable. However, because the Service already has an open rulemaking process in which it has proposed to delist the gray wolf in most of the United States, *see* 78 Fed. Reg. 35664 (June 13, 2013) (proposing delisting of all gray wolves except for the Mexican wolf subspecies), the Service could respond to this petition by modifying its 2013 proposal to delist the gray wolf, proposing to list the gray wolf as threatened, and opening a new comment period to seek input from experts, stakeholders and the general public as to whether reclassification of the gray wolf as threatened is warranted.

## **I. Introduction**

Gray wolves are an icon of America's wilderness. Highly intelligent and social, these animals are family oriented, pair for life, raise their pups using extended family groups, and have inspired Americans for centuries. Wolves connect us to nature, directly and indirectly. They drive tourism and economic gains. They promote and sustain healthy ecosystems. The ecological benefit of this keystone species is staggering—gray wolves counteract the negative impacts of overpopulation of prey species, have an important moderating influence on other predator species, and protect and facilitate ecosystem health. The wolf is one of our nation's most effective and important protectors of biodiversity in the environments in which it is found.

Gray wolf populations are still recovering from decades of persecution and cannot recover without continued federal protections. Government sponsored bounty programs resulted in mass extermination of wolf populations at the beginning of the last century, and the species was nearly eliminated from the landscape of the lower 48 states. Although laudable efforts to restore wolves were undertaken after the species' listing under the ESA, the species has not yet recovered. Today, the species still only occupies a mere fraction, as little as 5 percent, of its historic range.

Unfortunately, the Service has pursued a piecemeal approach to gray wolf recovery that is inconsistent with the ESA's command that species be recovered in all significant portions of their range according to the best available science. And over the last 15 years, the Service has repeatedly attempted to eliminate federal protections for wolves throughout their historic range based only on the progress toward recovery that has occurred in isolated areas. In so doing, the Service has consistently acted to stifle continued recovery, ignoring the potential for restoration of the species to viable but unoccupied areas of its historic range, and ignoring specific threats to long-term sustainability of healthy wolf populations. As one court described it, this effort appears to be nothing more than "a tactic" to remove protections from areas that the Service has already determined warrant such protections "despite the unabated threats and low to nonexistent populations outside of the core areas." *Defenders of Wildlife v. Secretary, U.S. Dep't of Interior*, 354 F. Supp. 2d 1156, 1171 (D.Or. 2005).

In 2014, Federal courts rejected the Service's most recent efforts to delist gray wolves in Wyoming and the Great Lakes regions. *Humane Society of the U.S. v. Jewell*, --- F.Supp.3d --- , 2014 WL 7237702 (D.D.C., December 19, 2014); *Defenders of Wildlife v. Jewell*, --- F.Supp.3d --- , 2014 WL 4714847 (D.D.C., September 23, 2014). In addition to denouncing the Service's fragmented approach to recovery, these courts also recognized that existing state management plans are extremely aggressive and intended to quickly and dramatically reduce wolf numbers and prevent further range expansion. *Id.* This is particularly concerning given the history of human persecution of the species, 42 Fed. Reg. 29527, and the fact that human-caused mortality continues to constitute the majority of documented wolf deaths. 76 Fed. Reg. 81682. Courts rejected the Service's reliance on the insufficient assurances of states to maintain only a bare minimum population of wolves, permitting the species to remain perpetually at the doorstep of extinction, in the face of substantial past and present hostilities.

There is no doubt that expanding wolf populations will create more opportunity for conflict with humans and continued threats to the species. A vocal minority of individuals have exhibited extreme animosity toward wolves, which should not be ignored. But social intolerance for a species is not a legal or rational reason to eliminate federal protections under the ESA. *See Humane Society of U.S. v. Kempthorne*, 481 F.Supp.2d 53 (D.D.C. 2006), *vacated as moot* 527 F.3d 181 (D.C. Cir. 2008). In fact, the difficulties associated with the human dimensions of wolf recovery efforts merely provide further evidence that federal oversight is still needed. In short, the job of wolf recovery is not complete—but it may be time for a new approach.

The threatened listing requested by this petition would provide a path forward to sustainable recovery of gray wolves throughout all significant portions of the wolf's range. If implemented effectively, a threatened listing would promote restoration of the species to those unoccupied areas of its historic range where it can still thrive, and to provide protections for the species in areas where threats to its long-term sustainability remain insufficiently addressed by recovery efforts to date and by state management plans for the future. Such a listing would also help conserve and promote natural balance in the myriad ecosystems that the presence of gray wolves has shaped through their interactions with and influence on other species. A threatened listing would also permit the Service to establish regulations to reduce or increase protections for the species as necessary and appropriate, and thereby allow expanded flexibility to authorize reasonable, science-based state and local management of wolf conflicts, including taking of wolves if consistent with the overarching conservation goals of the ESA, while preserving federal oversight to ensure full recovery of the species.

We are at a crossroads with wolves at which we either turn back regressively to a new period of exploitation or engage the spirit in which we sought their restoration in the first place, coupled with a determination to fully recover the species as the ESA requires. Having completely removed wolves throughout virtually all of their historic range, and having persecuted them in unimaginable ways, we must reengage them in a contemporary process that uses new understandings and insights, promoting harmonious coexistence with this iconic species by responsibly addressing conflicts while fully rejecting and protecting against unfounded antipathies.

## **II. Petitioners**

The twenty-two undersigned petitioners are national conservation and animal protection organizations, and regional and local organizations based in wolf range states, including areas of currently occupied habitat and areas in which suitable habitat still exists but which remains unoccupied (e.g. New England and the Pacific Northwest). The petitioners are unified by their strong interest in, and advocacy efforts to facilitate, protection of wolves from extant threats to the species and complete recovery of gray wolves under the Endangered Species Act. The petitioners represent a broad cross-section of organizations that have been active participants in regulatory and legislative processes relating to wolf protection and wolf recovery efforts at the state and federal level. Each of the petitioners is described more fully in Appendix A.

### **III. Wolf Ecology**

Wolves are the largest wild members of the *Canidae* (dog) family. They are also one of the most adaptable animals on the planet. Wolves have a circumpolar range including North America, Europe, and Asia, and recent genetic studies have suggested that wolves' range may even include portions of North Africa. (Mech and Boitani 2004; Linnell et al. 2008; Rueness et al. 2011; Gaubert et al. 2012). Gray wolves previously inhabited the vast majority of North America, excluding only portions of the driest deserts and portions of the southeastern United States, which is the historic range of a separate canid species, the red wolf (*Canis rufus*). Despite their adaptability, gray wolves are still absent from roughly 95 percent or more of their historic range in the United States, including extensive areas of currently suitable habitat. (Mladenoff et al. 1995; Carroll et al. 2006; Morell 2008). In part, the limited current range of wolves is due to past targeting of wolves for extermination by county, state and federal agencies. (Robinson 2005).

Gray wolves are territorial and social animals that exhibit group hunting and opportunistic scavenging behavior, normally living in packs of 7 or fewer animals, but sometimes attaining pack sizes of up to 20 or more animals. (Mech 1970; Mech and Boitani 2003). Packs are family groups consisting of a breeding pair, their pups from the current year, offspring from the previous year and up to four prior generations, and sometimes one or more unrelated wolves. (Mech 1970; Mech and Boitani 2003; Hunter 2011). Typically, only the top-ranking female and male wolves in each pack will breed and reproduce. (Mech and Boitani 2003). Wolves are typically but not always monogamous, become fertile as 2-year-olds and usually give birth once each spring to a litter of 2-5 pups (though litters of 1-11 pups have been recorded), and may continue to produce offspring annually until they are over 10 years old. (Mech, 1970; Fuller et al. 2003). Offspring usually remain with their parents for 10 to 54 months before dispersing, meaning that packs may include the offspring from up to 4 breeding seasons (Mech and Boitani 2003). Crucial to maintaining the genetic diversity necessary for healthy and sustainable populations, subadult and adult wolves disperse from their natal packs to locate other single wolves. These dispersing wolves remain nomadic until they locate members of the opposite sex and move to suitable unoccupied habitats to establish new packs and claim new territories (Mech 1970; Mech and Boitani 2003).

Pack structure is enormously important to wolves. Wolves establish home territories through urinary scent marking and howling, and by defending their territories from other wolves. Packs typically occupy and defend a territory of 33 to more than 2,600 square kilometers, with territories tending to be smaller at lower latitudes (Mech and Boitani 2003; Fuller et al. 2003). A wolf pack will generally maintain its territory, even as individual wolves occasionally disperse to form new packs, as long as the breeding pair is not killed. (Mech and Boitani 2003). However, if one or both members of the breeding pair are killed, the remaining members of the pack may disperse, starve, or remain in the territory until an unrelated dispersing wolf arrives and mates with one of the remaining pack members to begin a new pack. (Mech and Boitani 2003; Brainerd et al. 2008).

Wolf populations are generally self-regulating—their populations are generally limited by prey availability, but when prey availability is unusually high wolf populations are limited by density-dependent factors, such as disease, and pack stability and territoriality. (Carriappa et al. 2011). Human-caused mortality such as hunting and trapping harvest, however, can significantly affect wolf population levels. (Fuller et al. 2003; Creel and Rotella 2010). Where normal pack dynamics have not been altered by hunting and other sources of mortality, increased levels of reproduction and immigration can compensate for mortality rates under 30 percent (Sparkman et al. 2011; Vucetich 2012; Creel and Rotella 2010; Adams et al. 2008). Recent studies suggest the sustainable mortality rate may be even lower, and that hunting and trapping may have an additive or even super-additive effect on wolf mortality by increasing total mortality, beyond the effect of the direct killing itself, through the loss of dependent offspring or by disrupting pack structure. (Murray et al. 2010; Creel and Rotella 2010).

As a keystone predator species, gray wolves are incredibly important to the ecosystems they inhabit. Their physical structure is well-adapted to travelling quickly across long distances, allowing them to move fast and travel far in search of food, and they have large skulls and jaws, making them well-suited to catching and feeding on a variety of mammalian and other prey. (Mech 1970). Within the United States, studies of gray wolves in Yellowstone National Park and elsewhere demonstrate that wolves significantly shape their ecosystems, promoting biodiversity and overall ecosystem health. Prey animals modify their behavior, distribution and movements in response to wolves. (Ripple and Beschta 2004; White and Garrott 2005). By example, gray wolves limit overgrazing of saplings by elk in sensitive riparian environments and thereby permit other species, such as bison, beavers, birds, fish and amphibians to thrive by stabilizing riparian areas. (Ripple and Beschta 2003; Chadwick 2010). Wolves also have a controlling effect on other predator species, such as coyotes, preventing disproportionate loss of prey species like pronghorn. (Berger and Gese 2007; Smith et al. 2003; Berger et al. 2008). The trophic cascade of benefits provided by wolves is extraordinary, producing measurable positive effects even down to the microbes in soil. (Wilmers et al. 2005; Chadwick 2010). Because of the benefits wolves provide to other species and overall ecosystem integrity, broad recovery of wolves to more areas of their historic range would have substantial ecological benefit.

#### **IV. Wolf Taxonomy**

Numerous efforts have been made to taxonomically classify wolves in North America. (Young and Goldman 1944; Hall 1959, 1981). Nowak (1995) consolidated the gray wolf into five subspecies: the arctic wolf (*C. l. arctos*); the northern timber wolf (*C. l. occidentalis*); the plains wolf (*C. l. nubilus*); the eastern gray wolf (*C. l. lycaon*); and the Mexican gray wolf (*C. l. baileyi*). However, the results of mitochondrial DNA testing of historic and modern specimens suggests much greater genetic diversity for historic as opposed to contemporary wolf populations, as the genetic makeup of historic populations was apparently distinctly different from today's populations in some parts of the range. (Leonard et al. 2005; Leonard and Wayne 2008). This testing also suggests that the greatest continuing genetic diversity exists in wolves that formerly occupied the southern portions of the range, in most of Mexico and parts of

Arizona, New Mexico and Texas. (Leonard et al. 2005). Thus, some recent studies do not find support for several of the subspecies identified by Nowak (1995), but there is continuing support for recognition of the separate Mexican wolf subspecies (*C. l. baileyi*).

In its June 2013 proposed rule to delist wolves throughout the currently listed range, 78 Fed. Reg. 35664, the Service references upwards of fifty research articles that relate to wolf taxonomy. Nevertheless, the Service based its argument for delisting almost exclusively on the recent publication by Chambers et al. (2012), which was authored by four employees of the Service, and published in a journal administered by the Service. The Chambers report reviewed other literature and concluded that there are two major clades of wolves in North America, one being the western gray wolf (*C. lupus spp.*) and the other the eastern gray wolf (*C. lycaon*), in addition to the separately recognized red wolf species (*C. rufus*).<sup>3</sup> Like Leonard (2005), the Chambers report argues that current genetic and morphometric data are not entirely supportive of the subspecific classification of the arctic wolf (*C. l. arctos*). However, the Chambers report does support recognition of three subspecies of gray wolves in North America, the northern timber wolf (*C. l. occidentalis*), the plains wolf (*C. l. nubilus*), and the Mexican wolf (*C. l. baileyi*).

The Service's reliance on the Chambers report to declare three separate species of wolf in the conterminous United States—*C. lupus*, *C. lycaon*, and *C. rufus*—caused considerable controversy. Several commenters highlighted the political convenience of the Service's designation of *C. lycaon* as a separate wolf species, noting that this designation suspiciously supported the agency's past and existing efforts to delist wolves without addressing the listing status of wolves in the eastern United States immediately adjacent to, and expanding from, the western Great Lakes area. *See e.g.*, HSUS Comment *available at* Federal eRulemaking Portal, Document No. FWS-HQ-ES-2013-0073-41496 (“In every respect, the Service's decision to delist the gray wolf in the face of significant scientific uncertainty suggests that its decision is being influenced by politics, rather than based solely on the best scientific information as the ESA requires”); NRDC Comment, *available at* Federal eRulemaking Portal, Document No. FWS-HQ-ES-2013-0073-39993 (“Chambers et al. 2012 was motivated by the Service's desire to address a policy problem. Specifically, the Service was interested in identifying an alternative taxonomic scheme that would facilitate the removal of the nationwide listing of wolves.”). Indeed, multiple courts had previously rejected the Service's efforts to reduce ESA protections for gray wolves in the Great Lakes without addressing the remainder of the listing for *C. lupus* in the eastern United States. *See Defenders of Wildlife v. Norton*, 354 F. Supp. 2d 1156 (D. Or. 2005); *National Wildlife Fed'n v. Norton*, 386 F. Supp. 2d 553 (D. Vt. 2005); *Humane Society of the United States v. Kempthorne*, 579 F. Supp. 2d 7 (D.D.C. 2008). The Service's new declaration that all gray wolves historically occupying areas of the eastern United States outside the western Great Lakes were actually a different species than those historically and currently occupying the western Great Lakes, on the basis of conclusions reached by its own employees in a report published in its own journal, had the appearance of being made in order to satisfy the

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<sup>3</sup> The red wolf (*C. rufus*), which historically occupied the southeastern United States, and now occupies a small portion of North Carolina, has long been recognized as a distinct wolf species and is separately listed as endangered species. 32 Fed. Reg. 4001 (March 11, 1967). This petition does not propose any reconsideration of the listing status of *C. rufus*.



Service's desire to find a lawful means of delisting wolves in specific regions without addressing the listing status of wolves in unoccupied areas outside those regions.

Regardless of the Service's potential political motivations, many scientists—including renowned wolf biologists—questioned the Service's conclusion as to species status for *C. lycaon*, and the Service's consequent conclusion as to the historic range *C. lupus*. In 2013, a group of 16 experts in carnivore taxonomy and conservation biology, representing many of the researchers whose work was referenced in the Service's proposed delisting rule, wrote a letter to the Service stating that “[t]here is not sufficient information to support recognition of a new species of wolf, *C. lycaon*, and the geographic range reduction for *Canis lupus* in the eastern US as currently proposed.” Bergstrom, et al. (May 21, 2013), *available at* Federal eRulemaking Portal, Document No. FWS-HQ-ES-2013-0073-39245, Exh. 8. The American Society of Mammologists also wrote to the Service in 2013 to state its position that “[t]he taxonomic status of gray wolves in Eastern North America is far from settled,” and to question the Service's plan to “draw[] a taxonomic conclusion with crucial conservation implications based on a single study, not representative of the majority view among wolf taxonomists.” Heske, et al. (May 22, 2013), *available at* Federal eRulemaking Portal, Document No. FWS-HQ-ES-2013-0073-39245, Exh. 9. The backlash from the scientific community could not have come as a surprise to the Service. In 2011, the Service expressly acknowledged the limitations of the Chambers report while the report was still in preparation: “While Chambers et al. . . . provide a scientific basis for arguing the existence of eastern wolves as a distinct species, this represents neither a scientific consensus nor the majority opinion of researchers on the taxonomy of wolves, as others continue to argue that eastern wolves are forms of gray wolves (Koblmuller et al. 2009; vonHoldt et al. 2011).” 76 Fed Reg. 81669.

In September 2013, the Service announced that it would seek peer-review of the June 2013 proposed rule, in accordance with the agency's peer review policy. 59 Fed. Reg. 34270. The peer review process was administered by the National Center for Ecological Analysis and Synthesis, which selected six scientists to conduct an impartial review of the proposed rule. The review panel issued a final peer review report in January 2014. (NCEAS 2014). The peer review report makes clear that the Service's proposed rule is decidedly *not* based on the best available science. Specifically, the report was critical of the way in which the Service manipulated scientific information to defend its declaration that the currently listed *C. lupus* entity is not a valid species under the ESA; that *C. lycaon* should now be considered a separate species of wolf recognized to have historically occupied all or part of 29 eastern states in which *C. lupus* should no longer be recognized; that three subspecies of *C. lupus* (*nubilus*, *occidentalis* and *baileyi*) constitute the taxonomically valid representation of gray wolves in the conterminous United States; and that of these three only the Mexican wolf (*C. l. baileyi*) warrants protection under the ESA. (NCEAS 2014).

By the Service's own admission it recognizes that “. . . *Canis* taxonomy will continue to be debated for years if not decades to come. . . .” 78 Fed. Reg. 35670. But the Service must make listing decisions under the ESA “. . . solely on the basis of the best scientific and commercial data available.” 16 U.S.C. § 1533(b)(1)(A). “The obvious purpose of the

requirement . . . is to ensure that the ESA not be implemented haphazardly, on the basis of speculation or surmise.” *Bennett v. Spear*, 520 U.S. 154, 176-77 (1997). The best available science indicates the following: (1) Mexican wolves (*C. baileyi*) in the southwest United States are properly designated a separate subspecies of gray wolf from other members of the species; and (2) absent compelling additional information, the weight of current evidence strongly indicates that there is only one species of gray wolf in the United States, which includes all of the northeastern United States—accordingly this region of the country must continue to be included within the listing for gray wolves in the conterminous United States.

## **V. The Endangered Species Act and the History of Wolf Recovery Efforts**

The ESA is “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation” in the world. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). Congress enacted the ESA in 1973 “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 . . . .” 16 U.S.C. § 1531(b).

The ESA defines an “endangered species” as one “which is in danger of extinction throughout all or a significant portion of its range.” *Id.* § 1532(6). A “threatened species” is “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” *Id.* § 1532(20). The phrase “significant portion of its range” has been consistently interpreted with the historical range of the species in mind. “We conclude, consistently with the Secretary’s historical practice, that a species can be extinct, “throughout a significant portion of its range” if there are major geographical areas in which it is no longer viable but once was.” *Defenders of Wildlife v. Norton*, 258 F.3d 1136, 1145 (9th Cir. 2001); *see also, Defenders of Wildlife v. Department of the Interior*, 354 F. Supp. 2d 1156 (D. Or. 2005) (rejecting 2003 rule downlisting wolves to threatened status on grounds that the Service failed to take into account historic range outside of core recovery areas); *National Wildlife Federation v. Norton*, 386 F. Supp. 2d 553 (D. Vt. 2005) (same); *Defenders of Wildlife v. Norton*, 239 F. Supp. 2d 9 (D.D.C. 2002), *vacated on other grounds*, 89 Fed. Appx. 273 (D.C. Cir. 2004) (holding that the Service acted arbitrarily and capriciously when it failed to consider key areas of historic range when listing lynx as threatened).

When the Service lists a domestic species, it is also required to concurrently designate “critical habitat” for the species. 16 U.S.C. § 1533(a)(6)(C). Critical habitat is defined as including any occupied or unoccupied area essential to the conservation of the species, and any other occupied area that requires special management considerations or protection for areas. *Id.* § 1532(5)(A)(I). In addition, for any species listed as endangered, Section 9 of the ESA makes it unlawful for any person to, among other activities, “import any such species into, or export any such species from the United States,” or to “take any such species within the United States.” *Id.* § 1538(a)(1)(A), (B). The term “take” includes “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” *Id.* § 1532(19).

For species that are listed as threatened, rather than endangered, the Service “may,” but is not required to, extend the prohibitions of Section 9 to the species. *Id.* § 1533(d). However, for threatened species the ESA nonetheless *requires* the Service to “issue such regulations as [it] deems necessary and advisable to provide for the conservation of such species.” *Id.* at § 1533(d) (noting that “the Secretary *shall* issue such regulations” (emphasis added)). The term “conservation” is specifically defined in the ESA as “the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.” *Id.* at § 1532(3). The statutory definition of “conservation” further provides that “[s]uch methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping and translocation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.” *Id.*

ESA protections for gray wolves began in 1967 when they were protected under the Endangered Species Preservation Act of 1966. In response, the Service listed gray wolves in two separate subspecies—one in the western Great Lakes region, 32 Fed. Reg. 4001 (March 11, 1967), and one in the northern Rocky Mountain region, 38 Fed. Reg. 14678 (June 4, 1973). In January 1974, these subspecies were listed under the Endangered Species Act of 1973. 39 Fed. Reg. 1171 (January 4, 1974). In 1976, the Service listed an additional two subspecies as endangered under the Act, one in the southwestern United States, 41 Fed. Reg. 17736 (April 28, 1976), and one in Texas, New Mexico and Mexico, 41 Fed. Reg. 24064 (June 14, 1976).

In 1977, the Service determined that the listing of gray wolves by subspecies was “[un]satisfactory because the taxonomy of wolves [was] out of date, wolves may wander outside of recognized subspecific boundaries, and some wolves from unlisted subspecies may occur in certain parts of the lower 48 states.” 42 Fed. Reg. 29527 (June 9, 1977). The Service concluded that the species-level listing was appropriate because the gray wolf “formerly occurred in most of the conterminous United States and Mexico[, and] [b]ecause of widespread habitat destruction and human persecution, the species now occupies only a small part of its original range in these regions.” *Id.* Therefore, in 1978 the Service reclassified gray wolves as an endangered population at the species level throughout the contiguous United States, except for the Minnesota population which was listed as a threatened species. 43 Fed. Reg. 9607 (Mar. 9, 1978).

The separate threatened listing for wolves in Minnesota followed considerable resistance to an endangered listing from officials in the state. The governor of Minnesota opposed an endangered listing because they believed it would not allow for lethal control of depredating wolves. *Id.* at 9608. Similarly, the Minnesota legislature passed a resolution calling for “complete declassification of the wolf in Minnesota,” arguing that “hardship was resulting from wolf depredations” and it was appropriate for “the State to have exclusive control of its resident wolf population.” *Id.* Despite the resistance from Minnesota, the Service concluded that the State’s expressed concerns over wolf depredations, State resources, and State autonomy, were not among those factors “that may legally be considered in determining the classification of a species under the Endangered Species Act.” *Id.* The Service further stated that “while it is recognized that the

wolf may recently have increased its range in Minnesota, . . . even if the wolf had “reached carrying capacity in some parts of Minnesota,” those “areas represent[ed] a comparatively small portion of the original range of the species, and population density alone will not assure long-term welfare.” *Id.*

The Service developed recovery plans for the gray wolf as required by the ESA, 16 U.S.C. § 1533(f)(1), in three recovery areas—the Northern Rocky Mountains, the Western Great Lakes and the Southwest. In 1994, the Service designated the Yellowstone Experimental Population Area, 59 Fed. Reg. 60252 (Nov. 22, 1994), and the Central Idaho Experimental Population Area, 59 Fed. Reg. 60266 (Nov. 22, 1994), to facilitate reintroduction of “nonessential experimental populations” of gray wolves under Section 10(j) of the ESA. *See* 16 U.S.C. 1539(j). The Service introduced more than 60 wolves to these areas between 1995 and 1996. In 1998, the Service designated the Mexican Gray Wolf Experimental Population Area. 63 Fed. Reg. 1752 (January 12, 1998). The Service introduced 11 wolves to this area in March 1998.

## **VI. Prior Regulatory Proposals for Reduction or Elimination of Federal Involvement in Wolf Recovery**

Beginning in 2000, the Service began efforts to reduce federal protections for wolves under the ESA. In July of that year, the Service published a proposed rule to “to change the classification of the gray wolf (*Canis lupus*) . . . [on grounds that] the species’ current classification is no longer appropriate throughout most of its range.” 65 Fed. Reg. 43450 (July 13, 2000). The Service finalized this rule in April 2003. 68 Fed. Reg. 15804 (Apr. 1, 2003). The Service’s 2003 rule divided the endangered gray wolf species into four separate regional groupings—three distinct population segments (“DPS”) in the northeast, northwestern and southwestern United States that would remain listed under the ESA, and an area in the southeastern United States that would no longer remain listed under the ESA. *Id.* at 15804. The DPSs in the northeastern and northwestern regions were named the Eastern DPS and Western DPS respectively, and were downlisted to threatened status. *Id.* The DPS in the southwestern region was named the Southwestern DPS, and continued to be classified as endangered. *Id.* Finally, in a region comprised of sixteen southeastern states, wolves were delisted, not based on a finding of recovery or extirpation in the region, but instead based on a determination that wolves did not historically exist in that region and were thus the 1978 decision to list wolves in that region was erroneous. *Id.* The Service simultaneously enacted Section 4(d) regulations for the population segments downlisted to threatened status. *Id.* The 4(d) rules were substantially similar to the 4(d) rule promulgated for wolves in Minnesota, and these rules applied to most, but not all, of the new Eastern and Western DPSs. *Id.*; 43 Fed. Reg. 9612-9615 (Mar. 9, 1978).

The 2003 rule was challenged by conservation and animal protection groups in two Federal district courts, one in Oregon and one in Vermont, both of which rejected the rule and issued orders vacating it. *Defenders of Wildlife v. Sec’y, U.S. Dep’t of the Interior*, 354 F. Supp. 2d 1156, 1158–59 (D. Or. 2005); *Nat’l Wildlife Fed’n v. Norton*, 386 F. Supp. 2d 553, 557 (D. Vt. 2005). Both of these courts took issue with the Service’s decision to treat large areas of unoccupied viable wolf habitat the same as areas of occupied wolf habitat based only on progress

toward recovery in the occupied areas. The Oregon court rejected the Service's determination that unoccupied areas within the species' historic range were not a significant portion of the species' range warranting full protection under the ESA, even though large portions of that unoccupied area remained suitable to sustain a wolf population. 354 F. Supp. 2d at 1167-69. The Oregon court also held that the Service's approach of drawing lines around large areas of the wolf range, and declaring those areas DPSs in order to reduce protections throughout those large areas despite the fact that the species' recovery status varied dramatically within them, ignored the mandate of the ESA to address the poor recovery status of the species in much of the DPS. *Id.* at 1171-72. The Vermont court rejected the Service's approach of creating a DPS in order to delist it, noting that a wolf population must in fact exist in an area before a DPS can be designated for that area. 386 F. Supp. 2d at 564. The court further held that the Service could not simply ignore non-recovered areas by lumping them together with areas claimed to be recovered—regardless of the merits of the Service's finding that the size of the wolf population in occupied areas was large enough that the species was not in immediate danger of going extinct—because the Service had effectively ignored its duty to apply the statutory listing factors to the non-recovered areas. *Id.* at 565-66.

Instead of taking a broader view of wolf recovery, the Service's response to these judicial decisions was to take an even more piecemeal approach. Initially, the Service decided to grant the States of Wisconsin and Michigan permits to implement a depredation control program pursuant to Section 10(a) of the ESA, on the theory that such a program would increase social tolerance for the species and thereby enhance the likelihood of survival of the species. *Humane Soc'y of U.S. v. Kempthorne*, 481 F. Supp. 2d 53 (D.D.C. 2006), *vacated as moot*, 527 F.3d 181 (D.C. Cir. 2008). A federal court enjoined issuance of the permits upon finding that the Service's decision to allow endangered wolves to be killed, purportedly to “foster[] greater social tolerance for wolves,” *id.* at 54, ran counter to the plain language, intent, and legislative history of the ESA and could not be permitted, *id.* at 63.

Beginning in 2006 and continuing to present date, the Service attempted to delist wolves by drawing even narrower DPSs around occupied areas than the DPSs established in the Service's previously rejected 2003 rule. 72 Fed. Reg. 6052 (Feb. 8, 2007) (2007 Great Lakes delisting rule); 73 Fed. Reg. 10514 (Feb. 27, 2008) (2008 Northern Rockies delisting rule); 74 Fed. Reg. 15070 (Apr. 2, 2009) (2009 Great Lakes delisting rule); 74 Fed. Reg. 15123 (Apr. 2, 2009) (2009 Northern Rockies delisting rule); 76 Fed. Reg. 81666 (Dec. 28, 2011) (2011 Great Lakes delisting rule); 77 Fed. Reg. 55530 (Sept. 10, 2012) (2012 Wyoming delisting rule). In a series of federal court decisions each of these attempts was rejected, and, although the court rulings addressed different legal issues, all of these rulings touched on a continuing problem—the Service has persistently relied on the progress toward recovery achieved in some areas of wolf range in order to justify ignoring the continuing need to address remaining threats and potential for further recovery. *Defenders of Wildlife v. Hall*, 565 F. Supp. 2d 1160 (D. Mont. 2008); *Humane Society of U.S. v. Kempthorne (I)*, 579 F. Supp. 2d 7 (D.D.C. 2008); *Humane Soc'y of the United States v. Kempthorne (II)*, Stipulated Settlement Agreement and Order, Civ. No. 09-01092-PLF, Dkt. 27 (D.D.C., J. Friedman, July 2, 2009); *Defenders of Wildlife v.*

*Salazar*, 729 F.Supp.2d 1207, 1228 (D.Mont., 2010); *Defenders of Wildlife v. Jewell*, --- F.Supp.3d ---, 2014 WL 4714847 (D.D.C., September 23, 2014); *Humane Society of the U.S. v. Jewell*, --- F.Supp.3d ---, 2014 WL 7237702 (D.D.C., December 19, 2014). Recognition of this continuing problem is key to finding a lawful and prudent way forward toward recovery of gray wolves.

## **VII. Federal Protections are Still Needed to Complete Recovery Efforts and Address Threats to the Species**

Gray wolves previously inhabited the vast majority of the conterminous United States, throughout which they are currently listed as endangered, except in Minnesota where they are listed as threatened. Despite expansion of human populations, and consequent habitat loss, in large portions of wolves' historic range, wolves are very adaptable animals and there remain several areas of viable but unoccupied wolf habitat to which the species could be restored. (Mladenoff et al. 1995; Oakleaf et al. 2006). Wolves are long-range dispersers, capable of traveling for hundreds of miles in search of mates, adequate prey base, and suitable colonizing locations. For the species to be fully restored, it will be necessary to provide sufficient protections to allow wolves to engage in natural dispersal, exchange genetic material, and occupy available and suitable habitat. *See* 16 U.S.C. §§ 1531(b); 1532(3), (6) (purpose of the ESA is to conserve listed species across all or a significant portion of their range to the point at which the species no longer needs the protections of the Act); 50 C.F.R. § 424.11(d).

That the Service believes wolves to be fully recovered in some portions of their listed range, and incapable of recovery to some other portions of their listed range, does not absolve the Service of its responsibility to finish the job of recovery of wolves to those areas of still viable wolf habitat, and in areas where threats to sustainable wolf populations remain. Moreover, in its past and pending proposals for delisting, the Service's convenient but improper focus on the species' low risk of global extinction, varying levels of social tolerance for the species, and mere biological viability in occupied areas without adequate regard to threats to full recovery, ignores the fact that the ESA's stated purpose is to "provide a means whereby the *ecosystems* upon which endangered species and threatened species depend may be conserved." 16 U.S.C. § 1531(b) (emphasis added). This broader purpose is furthered by the presence of species across as much of their historic range as possible, especially for a species like the gray wolf, an apex predator whose presence on the landscape has innumerable ecological benefits.

By the Service's own admission, there are numerous areas within the conterminous United States that contain suitable habitat and yet remain devoid of wolves. These areas include the Northeast, parts of Michigan and the Dakotas, the Pacific Northwest, the Southern Rockies, and other parts of the West. *See Defenders*, 354 F. Supp. 2d at 1167, n.8 (discussing wolf habitat and dispersing wolves in the Northeast, Northwest, and the Dakotas); 65 Fed. Reg. 43462 (identifying favorable wolf habitat in the Northeast); 71 Fed. Reg. 15279 (discussing unoccupied wolf habitat in Michigan and North Dakota); 65 Fed. Reg. 43474 (noting that "there is certainly habitat that could support wolves" in western states such as Oregon, Utah, and Colorado). Yet the Service's downlisting and delisting proposals ignore the potential of wolves to re-occupy

these areas, and thus reach true recovery, by trumpeting progress made toward recovery in the species' current range.



Figure 1. USGS & FWS map of potential habitat based on synthesis of existing spatial models. Produced by the FWS in 2013 in response to a FOIA request by Public Employees for Environmental Responsibility.

Because wolves have not recovered throughout a significant portion of their range, they cannot be delisted at this time. Further, in order to meet the ESA's requirement that gray wolves be recovered throughout all significant portions of their range, the threats analysis under Section 4(a) in making a listing determination must be conducted at a meaningful geographic scale. By example, the pack structure and natural dispersal behaviors inherent in sustainable populations of wolves require careful consideration of the need for regulatory policy that addresses both occupied and unoccupied areas of wolves' range to ensure sufficient gene dispersal between existing and expanding populations.

Even in areas in which the species has made the greatest progress toward recovery, gray wolves remain vulnerable to a variety of mortality factors, including diseases and unsustainable killing by humans. While the Service's June 2013 proposed rule concludes that wolves will be resilient to these threats in both the short and long-term it is laden with qualifications that admit high levels of uncertainty about this. For example, in a single page addressing the issue of mortality the Service states: "... but substantial debate on this issue [sustainable mortality] remains ...", "... exact figures [on illegal killings] are unavailable ...", and "... we lack direct information on disease rates and mortality rates from disease ...". 78 Fed. Reg. 35683. Such

factors are cause for adopting a protective rather than unprotective approach, particularly given the precautionary mandate embodied in the ESA. *See TVA v. Hill*, 437 U.S. 153, 194 (1978) (“Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities, thereby adopting a policy which it described as “institutionalized caution.”); *Conner v. Burford*, 848 F.2d 1441, 1454 (9th Cir. 1986) (Congress “inten[ded] to give the benefit of the doubt to the species.”).

The threat of inadequately controlled human-caused mortality does not permit full delisting at this time. The consequences of opening wolf populations up to a renewed period of human exploitation could be severe. Several studies have indicated that a wolf population can only be sustained by regular breeding and dispersal if mortality rates are less than 30 percent, so long as normal pack dynamics have not been altered. (Sparkman et al. 2011; Vucetich (2012); Creel and Rotella 2010; Adams et al. 2008). However, current state management plans allow for greater mortality rates when permitted hunting and trapping levels are added to losses from other sources of wolf mortality. By example, for the 2013-14 hunting season, Wisconsin set a hunting and trapping quota of 275 wolves, out of approximately 822 wolves estimated to occupy the state. *See* WI Dept. of Natural Resources (“DNR”), Wolf Quota Press Release at <http://dnr.wi.gov/news/releases/article/?id=2851>. The quota thus comprised over 33% of the state wolf population separate from and in addition to the number of wolves intentionally killed pursuant to the state’s depredation control program, the number of wolves lost due to illegal poaching, and the number of wolves killed by accidents, disease and natural causes. Wisconsin state wildlife managers estimated that 126 wolves died the year before due to causes other than hunting and trapping. *See* WI Dept. of Natural Resources, Wisconsin Wolf season Report 2012 at <http://dnr.wi.gov/topic/hunt/documents/WolfReport.pdf>.

Recent studies suggest that hunting and trapping may have an additive or even super-additive effect on wolf mortality through the additional loss of dependent offspring or by disrupting pack structure. (Murray et al. 2010; Creel and Rotella 2010). Brainerd et al. (2008) addressed the issue of breeder loss in wolf packs through an analysis of pooled data, finding among other consequences that the loss of one or more breeders led to dissolution of groups and territory abandonment in 38% of cases. Further, Rutledge et al. (2010) concluded that human predation could affect evolutionary important social patterns in wolves and that intense harvest appeared to increase the adoption of unrelated wolves into disrupted packs. Similarly, Bryan et al. (2014) found that hunting wolves can change their reproductive and breeding strategies as well as create chronic stress for them, with potentially detrimental effects on the fitness of individuals, changes to packs’ evolutionary potential, and increased risk for population extinction. The potentially disastrous *indirect* results of human-caused mortality are not even acknowledged, let alone accounted for, in state management planning to date. This is particularly problematic given the past history of persecution of wolves at the behest of state officials, 78 Fed. Reg. at 35684 (noting that “[a]n active eradication program is the sole reason that wolves were extirpated from their historical range in the United States”), and the fact that human-caused mortality continues to constitute the majority of documented wolf deaths, 76 Fed. Reg. 81682.



In the short time that wolves have been delisted in the Northern Rocky Mountain and Western Great Lakes regions, recreational hunters and trappers have killed *over 3,500* wolves. See U.S. Fish & Wildlife Service, *Gray Wolves in the Northern Rocky Mountains*, at <http://www.fws.gov/mountain-prairie/species/mammals/wolf/> (containing Annual Reports of population numbers and mortality for the Northern Rocky Mountains region); U.S. Fish & Wildlife Service, *Wolf—Western Great Lakes*, at [http://www.fws.gov/midwest/wolf/about\\_wolves/mi\\_wi\\_nos.htm](http://www.fws.gov/midwest/wolf/about_wolves/mi_wi_nos.htm) (containing Annual Reports of population numbers and mortality for the Western Great Lakes region). Such widespread hunting and trapping has already led to population-level effects. By example, in Minnesota, a 2012-2013 count of the wolf population revealed that the population fell by 24% from the previous population count (conducted in 2008), much of which may be due to the over 400 wolves that were killed by hunters and trappers in the 2012-2013 hunting season—the first public hunt in the state in over four decades. *Id.* At the start of Wisconsin’s first wolf hunt in 2012, the population was at 782 animals; since that time the population has suffered a 15% decline. *Id.* Further, many of these states allow inhumane and indiscriminate killing methods including the use of steel-jawed leg-hold traps and hounds—encouraging the same behavior that lead to the near extirpation of wolves in the first place.

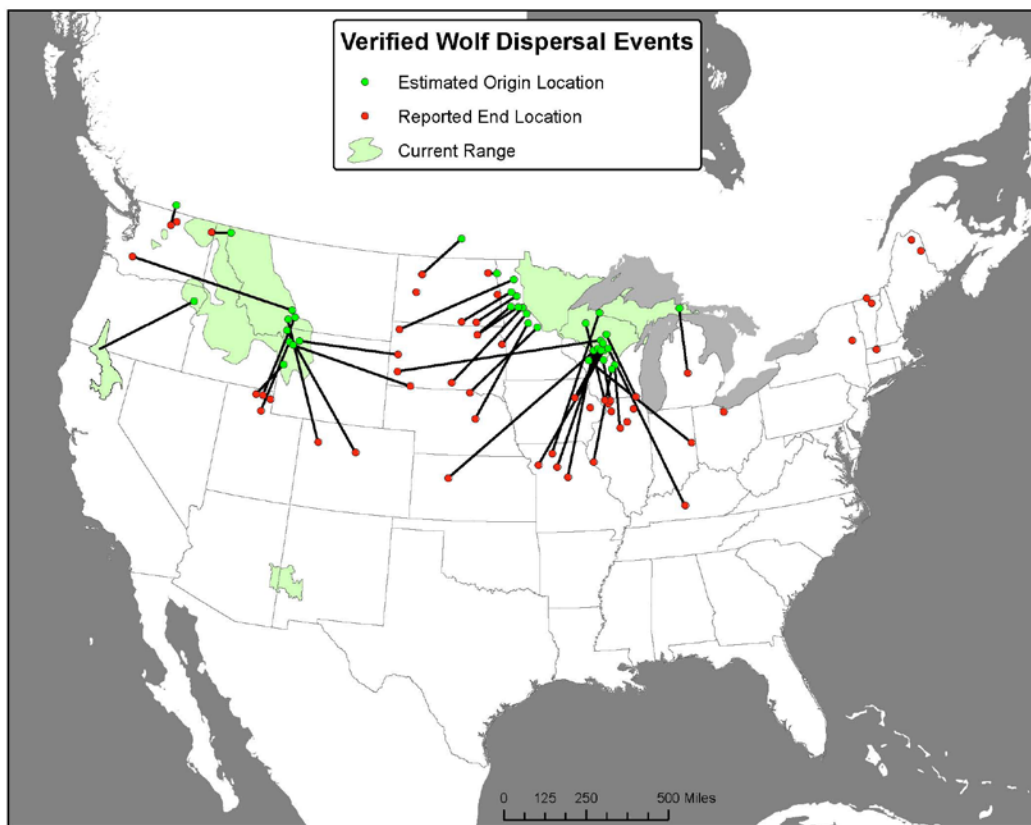


Figure 2. Map of verified wolf dispersal events from 1981-2014. Center for Biological Diversity, Making Room for Wolf Recovery (November 2014).

Without robust populations in the western Great Lakes and northern Rocky Mountains, dispersals to unoccupied areas cannot occur and suitable habitat will decline, making re-colonization much more difficult. As shown in Figure 2, it is beyond dispute that these two areas

provide the source populations needed for further wolf recovery, and help illustrate why a species-level listing as threatened is warranted.

In its June 2013 proposed rule, the Service fully admits that “regional populations of *C. lupus* are facing significant threats.” 78 Fed. Reg. 35717. Scientists agree—Bruskotter et al. (2014) conclude that wolves are still “threatened by high rates of human-caused mortality perpetrated by a very small portion of people who dislike wolves. And while illegal killing has likely influenced population expansion . . . it has not generally prevented range expansion. By contrast, legal killing, implemented by state governments and sanctioned by the FWS, combined with their limited view of recovery is likely to prevent range expansion and, therefore, recovery. Threats to wolves are only going to increase if management is turned over to states with hostile post-delisting management plans. By example, Wyoming allows unrestricted wolf killing (including no restrictions on the numbers of wolves taken, no specificity as to the methods of take, and no requirement to obtain a hunting license) in over 80% of the state. W.S. § 23-1-101(a)(viii)(B). Moreover, some states into which wolves may disperse lack any plan for such events. *See* 78 Fed. Reg. at 35675 (noting that wolves have been seen in Missouri, Indiana and Nebraska, but no regulatory mechanisms relating to wolves in those states). And other states have made no secret of their hostility towards wolves and plans to actively prevent recovery of the species. By example, Utah requires state wildlife officials to capture and kill any wolf that comes into the state in order to prevent the establishment of a viable wolf pack. Utah Code § 23-29-201.

In sum, wolves have not been recovered throughout a significant portion of their range, and curtailment of habitat, overutilization and the inadequacy of state regulatory mechanisms in both occupied and unoccupied areas remain current threats to the species that have not been adequately addressed. *See* 16 U.S.C. § 1533(a)(1).

### **VIII. A New Path Forward**

The HSUS hereby petitions the Service to consider whether to reclassify the gray wolf (*C. lupus*), excluding the Mexican wolf subspecies (*C. l. baileyi*), as threatened throughout the conterminous United States. Importantly, the proposal permits the Service to address the entire listed entity, 43 Fed. Reg. 9607 (Mar. 9, 1978), and therefore is a viable alternative to continued imprudent and unlawful efforts to delist the species or specific populations of the species. A threatened listing would continue needed federal oversight of wolf recovery while providing regulatory flexibility to address specific wolf conflicts in states where wolf numbers are relatively robust, while allowing recovery to occur elsewhere where suitable habitat for wolves remains unoccupied.

There are numerous peer-reviewed scientific studies that have modeled suitable wolf habitat in the lower 48 States (See Appendix B). These models have primarily reviewed available wolf habitat across the western United States, the upper Midwest and the Northeast. These areas encompass the majority of remaining gray wolf habitat, but do not address the range of the red wolf in the Southeast, areas of potential gray wolf habitat in the Appalachian mountains, or potential habitat in North and South Dakota—all areas that should be the subject

of additional modeling prior to any final determinations about the geographic scope of wolf recovery in the United States. These predictive models included screening parameters such as road density, human population density, prey density, and land cover/use. Figure 3 below illustrates a composite habitat map for gray wolves based on this compiled research.

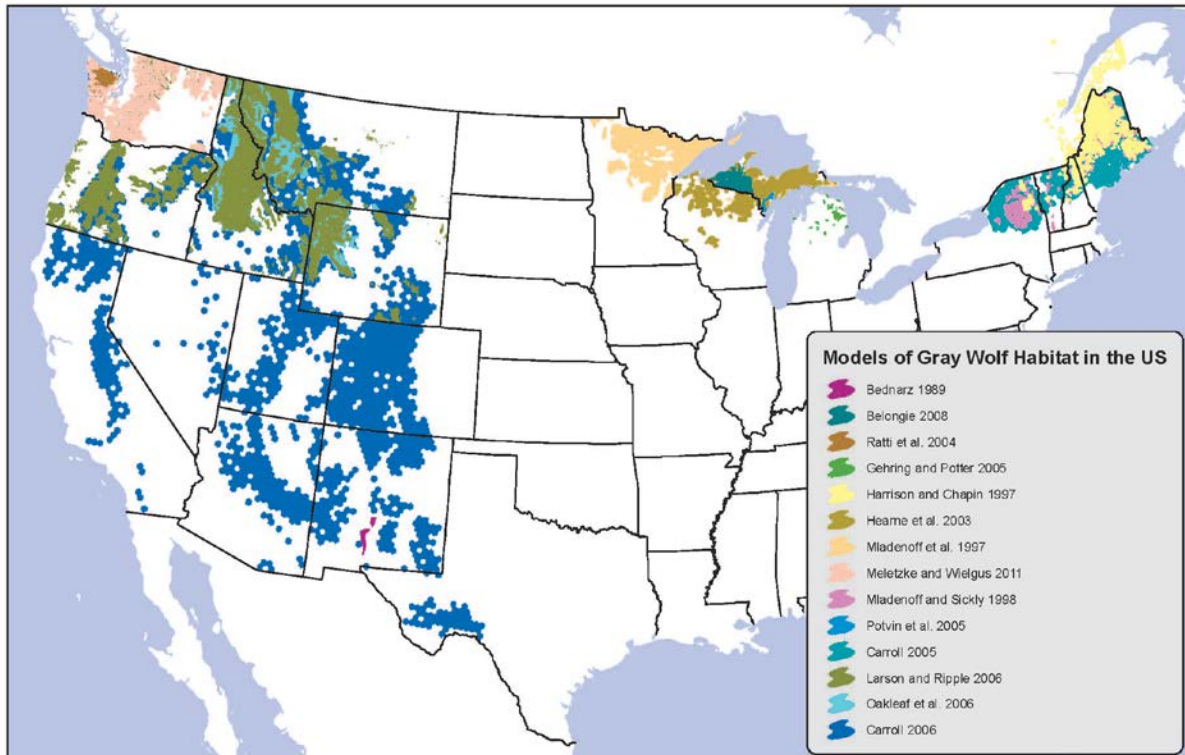


Figure 3. Suitable gray wolf habitat in the contiguous United States as identified in 14 modeling studies. Center for Biological Diversity, Making Room for Wolf Recovery (November 2014).

While there remains some disagreement as to exactly which areas constitute suitable habitat — based on habitat quality, population density, patch size, and prey base, there is overwhelming agreement that large tracts of suitable wolf habitat remain present in the lower 48. Most recently as an example, Vucetich et al. (in preparation) have recently developed a framework for gray wolf recovery that would include as a first step a threatened listing for gray wolves in occupied areas of the range, and which identifies several potential recovery areas in unoccupied portions of the species’ historic range.

Many of the threats to recovery that still remain are similar to the threats cited by the Service when listing wolves as threatened in Minnesota many years ago. In considering the status of Minnesota wolves, the Service asserted that the remnant Minnesota wolf population had survived without protection prior to its listing as endangered in 1967 and “the species was not in immediate danger of being extirpated in the State.” 42 Fed. Reg. at 29527. However, in the face of significant opposition to *any* ESA listing by state officials, the Service further stated that the species warranted continued protection as threatened in Minnesota due to continued risk of “[o]verutilization for commercial, sporting [and other] purposes,” which the Service found to be highly relevant given that “[d]irect killing by man . . . has been the major direct factor in the

decline of wolves in the conterminous United States.” 43 Fed. Reg. at 9611 (Mar. 9, 1978). The Service also highlighted the fact that “[w]olves still are regularly shot, especially when they appear in settled areas that are not part of their regular range [and] [i]llegal killing is a problem in Minnesota and other areas where the wolf still occurs.” *Id.* The Service cited the “inadequacy of existing regulatory mechanisms” as part of its rationale for continued federal oversight. Nevertheless, the Service cautioned that the inability to kill wolves “that may be attacking livestock and pets” could be “creating an adverse public attitude toward the whole species.” *Id.* These issues remain highly relevant to the recovery and listing status of gray wolves today. And more specifically, curtailment of habitat, overutilization and the inadequacy of state regulatory mechanisms in some areas remain current threats to the species that have not been adequately addressed. *See* 16 U.S.C. § 1533(a)(1).

A threatened listing would require the Service to thoughtfully craft a national recovery plan for the species—something it has never done before—which would identify those areas where the full suite of protections, coextensive with the protections extended to species of endangered status, are required to allow for the recovery of the wolf areas of unoccupied but still viable habitat in wolf range. The opportunity to address areas that still need heightened protections is what makes this proposal different than the one articulated in the Service’s 2003 rule. The federal court decisions rejecting the Service’s 2003 rule made clear that the Service could not rely on progress toward wolf recovery in some corners to wipe its hands of its obligations to the species in unoccupied but still viable areas of the wolf range. A threatened listing would permit the Service considerable latitude in providing increased regulatory protections and federal oversight where needed to finish the job of recovery of the species.

A threatened listing would also provide the Service the ability to monitor, and address through regulatory restrictions, those occupied areas of wolf range in which state regulatory mechanisms are inadequate. To date, most state management programs have been based on fear and rhetoric, rather than the best available science and principles of conservation biology. But states are more likely to take seriously their obligation to manage wolves responsibly, refraining from cruel and excessive lethal removal, if wolves remain listed under the ESA and the federal government has the ability to step in and quickly increase protections if states do not take a sufficiently precautionary approach.

At the same time, where states have proven responsible enough to manage their wolf populations, a threatened listing would allow the Service to approve state and local officials to use lethal control to deal with bona fide wolf conflicts where consistent with the best available science and the overarching conservation goals of the ESA.

HSUS believes that the existing ESA listing for gray wolves may, upon further review by the Service, warrant revision as follows:

- (1) Gray wolves (*C. lupus*) should be listed as threatened throughout the conterminous United States, except as noted below.
- (2) Mexican wolves (*C. baileyi*) are properly designated a separate subspecies of gray wolf in the southwestern United States, and should remain listed as endangered.

- (3) Absent compelling new information, the weight of current scientific evidence strongly indicates that there is only one species of gray wolf in the United States, which includes all of the northeastern United States. As a result, this region should continue to be included within the listing for gray wolves in the conterminous United States and included in recovery planning for the species.
- (4) Gray wolves were likely present in the Appalachian mountains, and there may be some overlap within the historic ranges of gray wolves (*C. lupus*) and red wolves (*C. rufus*). Until such time as the best available science makes clear that gray wolves were erroneously listed in a portion of the southeastern United States, this region should continue to be included within the listing for gray wolves in the conterminous United States and included in recovery planning for the species.

Frustrated with the failure of the Service’s efforts to provide a viable path forward to wolf recovery, Congress chose to take the unprecedented step of legislatively delisting wolves in Montana, Idaho and parts of several surrounding states in a budget rider passed in 2011. Public Law 112–10, Sec. 1713 (Apr. 15, 2011). The wisdom of such action is hotly disputed. But indisputable is the fact that legislative delisting of a species is clearly contrary to the spirit and purpose of the ESA, which calls for a thoughtful and nuanced approach to recovery of endangered species that can only occur through a robust and deliberative administrative rulemaking process. It is crucial to the long-term and sustainable recovery of gray wolves, and to the integrity of the ESA and our nation’s interests in protecting against loss of vulnerable species, that the Service shows leadership on this issue and demonstrates that an administrative path forward to recovery of wolves exists. The undersigned hope that this petition provides a platform for that action.

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**Justice for Wolves**

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## **Appendix A: Descriptions of Petitioners**

**The Humane Society of the United States** is the nation's largest animal protection organization with millions of members and constituents nationwide. HSUS is committed to the goals of protecting, conserving, and enhancing the nation's wildlife and wild habitats, and promoting the humane treatment of all animals. In furtherance of these goals and objectives, HSUS and its members have a strong interest in the recovery of gray wolves in the United States, and have actively engaged in advocacy related to protection of gray wolves under the Endangered Species Act and other federal and state laws. This advocacy has included decades of participation in, and litigation over, regulatory and legislative actions relating to wolf recovery efforts.

**The Center for Biological Diversity** is a non-profit conservation organization dedicated to the protection of native species and their habitats through science, policy and environmental law. The Center has more than 800,000 members and supporters dedicated to the protection and restoration of endangered species and wild places. The Center has worked for many years to protect imperiled plants and wildlife—including gray wolves—as well as open space, air and water quality, and overall quality of life.

**The Fund for Animals** is a national nonprofit organization with over nine regional offices and various animal sanctuaries located throughout the country. The Fund and its members and supporters are committed to preserving animal and plant species in their natural habitats, and preventing the abuse and exploitation of wild and domestic animals. The Fund's members enjoy viewing wolves and signs of wolves in the wild, and they place a high value on gray wolves as a species and because wolves play a vital role in the maintenance of healthy ecosystems. The Fund seeks to protect wolves and promote gray wolf recovery through a wide variety of actions including public education and advocacy, legislation and litigation.

**Born Free USA** is a global leader in animal welfare and wildlife conservation with offices in Washington, DC and Sacramento, California. Born Free USA maintains a significant portfolio of work related to protection of wild furbearers, including wolves, to stop unnecessary slaughter and cruel trapping practices that are inhumane to individual animals and threaten species' long-term viability. The mission of the organization is to end the suffering of wild animals in captivity, rescue individual animals in need, protect wildlife—including highly endangered species—in their natural habitats, and encourage compassionate conservation globally.

**Friends of Animals and Their Environment** is a Minnesota non-profit organization established in 1976. FATE is committed to the protection of wild animals and the ecosystems on which they depend. FATE advocates on behalf of animals, and in particular wolves, through public education and political lobbying. FATE's members and supporters enjoy observing wolves in the wild and have aesthetic and recreational interests in the environments that are supported by healthy wolf populations.

**Help Our Wolves Live** is a Minnesota non-profit advocacy organization founded in 1969 whose purpose is to work for the protection and preservation of the gray wolf and other endangered species. HOWL's members enjoy observing and monitoring Minnesota's wolf population. HOWL uses education and science to discourage human activities that adversely affect wolves and other wildlife, and HOWL has actively participated in governmental legislative and rulemaking processes concerning proposed actions that would affect wolves and other wildlife.

**The Detroit Zoological Society** has a mission to demonstrate leadership in wildlife conservation and animal welfare. To advance this goal the Detroit Zoological Society provides a broad audience with educational opportunities that lead to the appreciation and stewardship of nature. Through its Center for Zoo Animal Welfare, the Detroit Zoological Society promotes exotic animal welfare science and best practices. The Detroit Zoo is a licensed exhibitor that houses big cats, primates, and bears.

**Midwest Environmental Advocates** is committed to protecting the health and wealth of our water resources. MEA specializes in environmental enforcement actions, leveraging our expertise with science, the law and effective communication to mobilize communities, inform public policy and protect healthy water. We collaborate with citizens, environmental groups, faith groups and entire communities to turn back threats to water quality and quantity. We empower ordinary people to act as informed stewards of the healthy water on which our lives depend. MEA fully supports gray wolf recovery, as wolves are a keystone species whose beneficial effects on the environment include benefits to natural waters.

**Predator Defense** is a nonprofit organization based in Oregon whose mission is to protect native predators and create alternatives for people to coexist with wildlife. Predator Defense works to spearhead legislation, disseminate research findings, monitor government agencies, and, when necessary, pursue legal action, to protect wildlife species. We also serve as a resource for reporters, elected officials, and the public. Predator Defense has been very active on wolf issues through education, lobbying, participation in regulatory processes, and other efforts. We recently produced a film “The Imperiled American Wolf” to raise awareness to the current plight of the species.

**National Wolfwatcher Coalition** is a nonprofit, all volunteer organization. We educate, advocate, and participate for the long term recovery and the preservation of wolves based on the best available science and the principles of democracy. We educate the public, advocate for science-based decision making at every level of government, and participate in activities that promote citizens’ awareness and participation in the decision-making process about wolves. We are a moderate organization that seeks to find common ground among all stakeholders and encourage solutions to roadblocks that challenge wolf recovery.

**Northwoods Alliance** is a nonprofit conservation organization whose mission is the protection and conservation of Wisconsin land, water and habitat. Most Northwood Alliance board members and many members live within Wisconsin wolf territory, designated as “wolf harvest zones” under recent statutory and administrative laws. Northwood Alliance has a long history of supporting research, advocacy and education concerning Wisconsin wolves and the habitat necessary for their survival.

**Wisconsin Federated Humane Societies** is the only organization in Wisconsin that represents humane societies throughout the state. Established in 1927, WFHS and its network of shelter professionals and state wide partners provide educational assistance to any society or municipality requesting it. In addition, WFHS provides quality educational opportunities for shelter personnel and promotes animal welfare advances, including those to protect wolves, through state legislation.

**Minnesota Humane Society** was founded in 1869, and is the oldest humane society in Minnesota. MHS is a statewide education, advocacy and rescue organization dedicated to protecting the lives and interests of Minnesota's animals, both domesticated and wild. From its early victory in the late 1800's of establishing one of the first laws making cruelty to animals a crime, MHS has consistently confronted the issues, raised awareness, and taken bold action to make Minnesota a better and more humane place for animals. MHS has also focused on protecting the wolf in Minnesota through its educational programs and advocacy work in the state legislature.

**Howling for Wolves** is a Minnesota-based wolf advocacy organization formed in 2012 for the purpose of educating the public and policymakers about the gray wolf and the benefits of a viable wolf population on the forest ecosystem, to foster understanding and tolerance, and to ensure the long-term survival of wolves. The wolf is a critical part of our native ecosystem and the long-term survival of the species in Minnesota is critical to the survival of the species as a whole and is our primary objective. Howling for Wolves supports informed, scientifically-proven management planning for gray wolves and other wildlife populations. We believe that smart, science-based management policies should be promoted ahead of politics.

**Detroit Audubon Society** was established in 1939 and has over 6,000 members in southeast Michigan. Detroit Audubon's mission is to promote awareness and protection of the environment through education, research and advocacy. We support local activities to foster the preservation of birds and the clean air, water, wetlands, grasslands, woodlands and other natural resources they depend upon. We have a strong interest in supporting the recovery of the gray wolf, because of the importance of top predator species to the health and functioning of ecosystems of which they are part, including birds. We know that bird populations do better when wolves are around. The recovery of the wolf is likely to set a precedent for recovery of other species, including endangered birds.

**Sault Sainte Marie Tribe of Chippewa Indians** is a 44,000-strong federally recognized Indian tribe that is an economic, social and cultural force in its community across the eastern Upper Peninsula, Michigan counties of Chippewa, Luce, Mackinac, Schoolcraft, Alger, Delta and Marquette. The Sault Tribe operates many enterprises that employ both Natives and non-Natives and fund tribal programs. The tribe works hard to be self-sufficient, good stewards of the land and waters, and helpful to the surrounding community. The wolf is an important part of Sault Tribe culture. Anishinaabeg dodems, or clans, dictate what one's traditional role in the society would be, and the Wolf is one of the Anishinaabe clans. Many members of the Sault Tribe have participated in petition drives to prevent the recreational hunting of wolves.

**Wildlife Public Trust and Coexistence** has an organizational mission to raise awareness of Wisconsin's wildlife, land and water resources. Wisconsin's natural resources are held in Public Trust for all to enjoy for generations to come. Coexistence with wildlife should be of the highest priority. We hold Wisconsin hunters and trappers accountable to their promise to "respect our wildlife and maintain a high standard of ethical hunting practices." Exploitation of Wisconsin's wildlife, land and water is not in the best interests of our fragile ecosystem nor in the best interests of all Wisconsin citizens. Only awareness can generate change.

**Minnesota Voters for Animal Protection** is a nonprofit organization dedicated to preventing animal cruelty and suffering by working politically at the local and state level to promote humane legislators and legislation in Minnesota. Minnesota Voters for Animal Protection monitors and provides information to the public about pending state and federal legislation affecting Minnesotans. Our organization has been very active on wolf protection and conservation issues.

**Friends of the Wisconsin Wolf** is a grassroots nonprofit organization founded in 2011. Our purpose is to advocate for the protection of wolves in Wisconsin and to stop hostile state management planning that threatens the species. Friends of the Wisconsin Wolf believes that continued co-existence with wolves requires inclusion of the interests of wolves into land use and resource utilization practices to minimize conflicts with humans and provide enough space and resources for wolves to survive.

**Wolves of Douglas County Wisconsin** is a grassroots volunteer citizen organization. WODCW's mission is to provide wolf education, awareness and advocacy: To educate the public regarding the science, social and economic factors that impact wolves and people. To create public wolf awareness by promoting research methods for predator friendly methods of farming and ranching. To advocate by politically supporting legislative changes in Wisconsin and the United States that promote wolves as necessary components for healthy and balanced ecosystems. To advocate that wolves remain healthy, wild and not harassed by trophy hunts. To create a climate of coexistence between humans and wolves through non-lethal wolf management.

**Justice for Wolves** promotes restoring and maintaining federal protection for wolves and establishing state and national carnivore conservation acts to protect carnivores. JFW believes that wolves and other native predators are too often targeted for inhumane persecution. JFW works to shift the policies and laws that allow native predators to be unnecessarily killed under the guise of management. To this end, we have drafted state carnivore conservation legislation to protect native predators and the habitats that they need for survival.

**Wildwoods (Minnesota)** is a nonprofit wildlife rehabilitation and education organization based in Duluth, Minnesota. Wildwoods works to help orphaned, sick, and injured animals return to their natural lives. Many of these animals have been harmed directly or indirectly by humans and human activity. Wildwoods strives to be a resource for people who find such animals in need of assistance, and to educate people on ways to reduce human-wildlife conflicts.

## **Appendix B: Wolf Habitat Modeling Literature (Figure 3)**

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