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## To Whom it May Concern:

The American Society of Mammalogists (ASM) is a non-profit, professional, scientific, and educational Society consisting of nearly 3,000 members from all 50 United States and 60 other countries worldwide. The ASM was founded in 1919 and is the world's oldest and largest organization devoted to the study of mammals. We strongly support the conservation and responsible use of wild mammals based on current, sound, and accurate scientific knowledge. The ASM has a long history of reviewing issues related to mammalian conservation, and where appropriate, adopting positions on issues concerning the conservation and responsible management of mammals and their habitats based upon our scientific expertise.

ASM has closely followed and frequently offered its professional opinion on the issue of gray wolf (*Canis lupus*) conservation and restoration in the US. We look forward to the day when the scientific evidence clearly points to the conclusion that federal protection of the gray wolf under the Endangered Species Act (ESA) is no longer needed to ensure full recovery of this important apex predator. However, we believe it is premature to declare that that day has arrived, and therefore, we maintain that the proposed rule to remove all ESA protections from all gray wolves in the US except for the Mexican gray wolf (*C. l. baileyi*) "where found" is, at best, premature.

Below we briefly describe the concerns we have about this proposal. We understand that the peer review process that was aborted earlier this fall will be restarted soon; in view of this, we request that, at a minimum, you postpone this decision until the views of all experts on gray wolf biology have been fully aired.

1) The recently delisted Northern Rocky Mountain (NRM) Distinct Population Segment (DPS) of the gray wolf has not had time to recover fully. In the first year or so after the removal of ESA protections, this DPS has been subjected to a level of human-caused mortality that is unprecedented in the history of the ESA. All told, "34% of the absolute minimum NRM DPS estimated wolf population was removed due to human-causes [sic]" in 2012 (USFWS 2013). If this level of mortality continues or even increases, particularly as states consider increasing quotas and season lengths, recent simulation modeling casts serious doubt on the long-term viability of the population (Creel and Rotella 2011). Establishment of breeding populations outside of the NRM DPS with connectivity to the latter—which has begun to happen in Washington and Oregon—would help ameliorate that effect. There is sufficient wolf habitat and prey in the northern Rockies outside of the currently occupied NRM recovery area, primarily in Colorado and Utah, that could support a wolf population equal to that in the NRM (Carroll et al. 2006).

The Service has repeatedly made the claim, again most recently in the March 2013 Service Review of the 2012 wolf population in the NRM DPS (Jimenez *in* USFWS 2013), that this DPS has surpassed its original recovery goal of *100 wolves in each of the 3 recovery areas for 3 consecutive years* continuously since 2002. The Service's own data show this not to be the case (USFWS 2013; Fig. 6a); in fact, the annual wolf censuses in the NW Montana recovery area were <100 in 2003 and 2004 and increased to >100 in 2005. This means that the first year in which the original criteria were met was 2007. However, the original recovery goal was increased to 150 wolves in each of the 3 recovery areas in Secretary Salazar's delisting rule published in 2009 (April 2009 Federal Register notice *in* USFWS 2013). The first year that the NW Montana recovery area would have achieved a census of 150 wolves for 3 consecutive years would have been 2008 (USFWS 2013; Fig. 6a). Thus, even by the very conservative recovery goals that were adopted, this population has been technically recovered in the 3 core recovery areas in the NRM DPS only for the past 5 years. In fact, those original recovery goals were developed by an arbitrary process and were not the result of any scientific study or data (Bergstrom et al. 2009).

The core recovery area of the NRM DPS currently occupied by wolves represents only 26% of the actual land area of the DPS and only 6% of the historic range of the non-Mexican gray wolf populations of the US states west of the 97th parallel (excluding Arizona and New Mexico; Bergstrom et al. 2009). Removing ESA protections from this vast area of suitable habitat and thus potentially occupied wolf range would probably prevent the re-establishment of the gray

wolf in significant areas across the mountainous West, thus ensuring that the species remains extirpated from "a significant portion of its range" (SPR), an outcome contrary to the spirit and letter of the ESA. Extending the ecosystem recovery that has been documented to result from restoring this apex predator (e.g., Ripple and Beschta 2003) is reason enough to continue federal protection in areas of suitable habitat not currently occupied, because Congress intended for ecological value and geographic extent—aside from the question of extinction risk for the species as a whole—to be considered before a delisting decision is made (Carroll et al. 2009).

The attempt within this delisting proposal to re-define SPR as, essentially, the current range of the gray wolf, ignores the Service's own precedents when determining to list the species under the ESA and in undertaking its restoration to the NRM, which was not part of the "current range" of the gray wolf prior to re-introduction. Additional areas of the former range of the gray wolf, comparable in extent to the portion of the NRM currently occupied, include habitat that is already suitable or could be suitable with proper management and regulation. Knowing that the excessive human-caused mortality currently imposed upon recovering wolf populations outside of parks and tribal areas in the NRM is the leading threat to wolves re-claiming these remaining areas of suitable habitat, delisting in areas surrounding the NRM would effectively prevent natural recolonization of significant portions of the historic range of the gray wolf.

We reject the assertion in this proposed rule that "...areas considered 'unsuitable'... are not occupied by wolves due to human and livestock presence and the associated lack of tolerance of wolves..." USFWS offers no data to substantiate the claim that all areas currently unoccupied by wolves are unsuitable because of high intolerance by the human population in those areas. In fact, one recent study concludes that some of these areas have higher tolerance for wolves than areas of the coterminous U.S. currently occupied by wolves (Treves and Martin 2011). The "intolerance" assumption also ignores studies finding widespread public support for reintroduction in unoccupied range in the southern Rockies (Bruskotter et al. 2007).

The ESA mandates that USFWS evaluate suitability of habitat based on best current published science (e.g., Carroll et al. 2006), not mere assumptions that are too easily influenced by political expediency. USFWS undeniably mitigated substantial threats from intolerant sectors of the public in the NRM region throughout the managed re-establishment of wolves to the Greater Yellowstone Ecosystem from 1995 to 2012. Indeed these threats were an integral part of the planning process beginning in 1987, which resulted in the designation of NRM wolves as a non-essential, experimental population under the ESA, allowing lethal control to mitigate livestock losses. To claim now that such threat mitigation is not possible in other areas of suitable habitat that wolves might colonize if they remained under closely managed federal protection (and otherwise would be very unlikely to colonize, given the extremely high mortality rates now being experienced without protection) is to deny the success of the agency's own 17-year program of wolf restoration in the NRM.

2) The taxonomic status of gray wolves in Eastern North America is far from settled. In fact, the USFWS seems to have drawn a taxonomic conclusion with crucial conservation

implications based on a study published in its own journal and one other recent paper, which are not representative of the majority view among wolf taxonomists (von Holdt *et al.* 2011; R.M. Kays, pers. commun.). A recent case should serve as a cautionary tale: in a previous delisting proposal on which we commented—Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*) in 2006—the Service similarly based its decision on a single study, which later was refuted by studies conducted by U.S. Geological Survey scientists and others, and by a special peer-review panel convened to arbitrate the controversy (King et al. 2006; Vignieri et al. 2006). This resulted in the USFWS reversing its decision and re-listing the Colorado DPS of the subspecies. In the case of eastern wolves, the Service should wait until the science is settled.

In any case, the apparent lack of any U.S. wolf population east of the Great Lakes should warrant ESA protection for any wild wolf that may colonize suitable habitat in that region, regardless of whether it belongs to Canis lupus or C. lycaon. The USFWS should not be obsessed with "taxonomic purity" of the endangered species in need of protection, especially in the case of this top predator, given that an explicit underlying principle of the ESA is conservation of native ecosystems. The ecosystems of the northeastern U.S. are distinctly different from those of the Western Great Lakes region or the NRM, but their conservation can be aided, as has been the case in the NRM (see Ripple and Beschta 2003), by allowing the restoration of the top predator, regardless of its precise genetic lineage. Doing so may even have long-term human health benefits (see Levi and Wilmers 2012). Especially when there is doubt about the genetic and taxonomic identity of a long-extirpated top predator (and one with a considerable history of hybridization; von Holdt et al. 2011), the geographic area and its otherwise intact native ecosystems should be the primary focal point for endangered species conservation rather than a particular genetic lineage of the species in question. USFWS has proven in the past that it understands this concept, given that it restored wolves to the Greater Yellowstone Ecosystem from stocks in Canada, and it interbred western cougars (*Puma concolor*) with the disjunct population of endangered Florida panthers (P. c. coryi) to repair the effects of inbreeding in the latter population. In both cases, USFWS made the right decision to restore and conserve a top predator to a unique ecoregion, without an excessive concern for genetic purity of the stock.

3) We agree with the Service's proposal to recognize the Mexican gray wolf (*C. lupus baileyi*) as a distinct subspecies and to list it as endangered. However, given that this taxon is one of the most endangered mammals in North America and its recovery has stalled, it is remiss for the Service not to designate a specific geographic area for its future recovery. The Mexican wolf recovery plan, which has endured lengthy delays and numerous setbacks in implementation, has identified areas well to the north of the current distribution as *essential to the recovery of this critically endangered species*. We do not feel that designating the species as protected "where found" is strong enough protection to overcome the many obstacles to recovery that this struggling species has faced in the region. Because we also support decoupling the Mexican wolf status designation and recovery planning from the rest of the proposed rule, we refer you to

a more in-depth comment on this part of the proposed rule, written jointly with the Society for Conservation Biology, separately submitted as a formal public comment on this rule.

The preceding was a brief synopsis of the concerns ASM has about the proposed delisting. We would be happy to discuss these issues with you at greater length and to make available our expertise on gray wolf conservation at any time. Thank you for your consideration.

Respectfully yours,

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