

# American Society of Mammalogists

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Division of Policy and Directives Management  
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Dear U.S. Fish and Wildlife Service:

The American Society of Mammalogists (ASM, hereafter “The Society”) 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 Society 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.

We are submitting this statement of the Society in response to an invitation by USFWS to comment on the proposed plan to remove endangered species protections for the Wyoming population of the gray wolf (*Canis lupus*). On 25 November 2008, as part of the public comment on the proposed rule to delist wolves in Idaho and Montana, we wrote that, in our professional scientific judgment, the Northern Rocky Mountain (NRM) wolf population would likely suffer unsustainable declines in population if management were turned over to the states of Idaho and Montana, given the stated goals of the states—particularly Idaho—of removing large proportions of their wolf populations annually. We forwarded our 2008 letter to the Obama Transition Team. In that letter we stated:

“Although the current NRM Gray Wolf population has reached and surpassed the initial recovery goals, we believe that a better plan for long-term recovery of Gray Wolves in the region would be to establish a minimum metapopulation size in winter of 3,000 wolves within the dispersal range of currently thriving populations (i.e., the true DPS, not that defined by state management-area boundaries). Until this target is reached, it is unlikely that the NRM metapopulation will have a sustainable minimum number of breeding animals of 500 (based on minimal requirements for mate finding, pack formation, and maintenance of genetic variation; Franklin 1980, Gilpin and Soulé 1986, Soulé 1987).”

As it turns out, subsequent to legislative delisting in Idaho and Montana effective May 2011, the *documented* total of wolves legally harvested and killed for control by government agents in Idaho in the year from 1 April 2011 to 1 April 2012 was 492, which is 48% of that state’s total wolf population; adding *estimated* illegal kills and natural mortality brings the total annual mortality of Idaho wolves to 59% (Cole 2012). A recent meta-analysis of 21 North American wolf populations has concluded that human offtake has been additive to super-additive of natural wolf mortality, and that mortality rates considerably lower than what the Idaho population has just experienced are sufficient to yield unsustainable declines, with declines continuing some years after the mortality was induced (Creel and Rotella 2011). Our understanding from studying this proposed rule is that wolves occurring in 86% of the state of Wyoming would be subject to completely unregulated human offtake, with no season or quotas. Given the enduring negative attitudes of some residents who never accepted wolf restoration in the first place, such unrestricted killing will predictably lead to mortality rates at least as high as those we have just witnessed in Idaho.

This magnitude of human-induced mortality (around half the population in a single year) so soon after a species is removed from federal Endangered Species Act (ESA) protections moves from the unprecedented (see Bergstrom et al. 2009) to the unimaginable. Although a recent study of genetic connectivity among the subpopulations of NRM wolves found high levels of genetic diversity, that was a study of a rapidly expanding population, and the authors stress that “successful conservation of Northern Rocky Mountain wolves will rely on management decisions that promote natural dispersal dynamics and minimize anthropogenic factors that reduce genetic connectivity (vonHoldt et al. 2010).” The extremely heavy mortality in the past year in Idaho, and the likelihood of similar human-induced mortality rates of the Wyoming population next year, are a prescription for the exact opposite of what these authors recommend for successful NRM wolf conservation.

We are particularly concerned about the likely 100% mortality of wolves dispersing south toward Colorado. South of the Wind River tribal lands to the Utah and Colorado borders, wolves will be subject to year-round unregulated take. In terms of habitat (federal lands with high elk populations), Colorado has the highest potential for healthy wolf populations in the entire region (Carroll et al. 2006) and therefore constitutes an important and “significant portion of its [NRM gray wolf] range.” Approving

Wyoming's current delisting plan, which will likely ensure Colorado is never populated with recovering NRM gray wolves, amounts to an abrogation of the USFWS obligation under the ESA to ensure that a species is not endangered "over a significant portion of its range."

It is biologically indefensible for the agency overseeing the ESA to put this recently restored species at significantly elevated risk of decline in the core recovery area and to prevent this recovering species from colonizing large areas of suitable habitat where it remains extirpated. And it is irresponsible to the taxpayers—who have spent \$43 million on wolf restoration since 1974 (USFWS 2011)—and a betrayal of the broader public trust to now increase the risk of that recovery being unsustainable. Once again, USFWS in this proposed rule is serving the narrow interests of key constituencies in the wolf recovery zone rather than the broader societal interests that are both the spirit and the letter of the ESA. And at what cost? Since 2003 in Wyoming, 1 wolf was killed for depredating livestock for every 1.3 cattle and 1.1 sheep lost to depredation (Jimenez 2012).

The statewide (Wyoming) annual loss rate of 107.5 livestock attributed to wolf depredation since 2003 is a very small fraction of total livestock mortality, and it has been decreasing in Wyoming (from a peak of 135 in 2006 to  $\leq 60$  in the past 4 years; Jimenez 2012). There seems to be an unrealistic expectation of nearly zero tolerance for wolf depredation, even on federal public lands, and a tacit assumption that lethal control should be the primary means of addressing depredation (which we feel it should not), and we feel this attitude is driving the unwarranted conclusion that the American public must accept a much smaller and heavily managed wolf population as the only solution. But recent research by the USDA-APHIS National Wildlife Research Center concludes that gray wolf populations are density-dependent or self-regulating (Cariappa et al. 2011). That implies that, even if wolves are not harvested or killed for control, territorial wolf packs will stabilize at fairly low densities (as they have in Yellowstone National Park; USFWS 2012), and depredation will be a stable phenomenon that can feasibly be reduced by non-lethal, preventive means.

Finally, a much smaller and likely less sustainable wolf population, in addition to serving as an unproductive source of emigrants seeking to fill unpopulated habitats, will also constitute a population of an apex predator with less ecological functionality, and will not avert the "trophic downgrading" of NRM ecosystems (Estes et al. 2011). In our 2008 letter, we wrote:

"Another reason we are urging adoption of new, higher recovery goals and recovery over a larger area within the potential DPS relates to the many unanticipated ecosystem benefits accruing from the trophic cascade triggered by successful re-establishment of the top predator in otherwise protected Northern Rocky Mountains ecosystems. This ecosystem restoration effect has been well documented in Yellowstone NP and includes, for example, restoration of riparian and beaver-pond habitats and communities (Ripple and Beschta 2003). Such effects require a sustainable and functional predator population and will not be realized over a broad area

by the likely small population sizes under the current recovery levels. We believe that predator population “ecosystem effects” must be considered within the definition of recovery levels, and moreover, that ecosystem restoration was part of Congress's original intent in passing the ESA.”

In summary, because of our concern for the sustainability and natural expansion of this recovering species, for the health of ecosystems in the NRM region, and for the greater societal interests to which the ESA speaks, we strongly recommend that USFWS withdraw this proposed rule to delist the gray wolf in Wyoming, considering the above-stated deficiencies in that state’s management plan

Thank you for your careful consideration of our comments.

Respectfully,



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## References

- Bergstrom, B.J., S. Vignieri, S.R. Sheffield, W. Sechrest, and A.A. Carlson. 2009. The Northern Rocky Mountain gray wolf is not yet recovered. *BioScience* 59:991-999.
- Carroll, C., M.K. Phillips, C.A. Lopez-Gonzales, and N.H. Schumaker. 2006. Defining recovery goals and strategies for endangered species: The wolf as a case study. *BioScience* 56: 25-37.
- Cariappa, C.A., J.K. Oakleaf, W.B. Ballard, and S.B. Breck. 2011. A reappraisal of the evidence for regulation of wolf populations. *Journal of Wildlife Management* 75: 726–730.
- Cole, K. 2012. Wolf mortality in Idaho, a final toll. 48–59 percent of Idaho wolves killed in one year. *The Wildlife News*, 8 May 2012.  
<http://www.thewildlifeneeds.com/2012/05/07/>
- Estes, J.A., J. Terborgh, J.S. Brashares, et al. 2011. Trophic downgrading of Planet Earth. *Science* 333: 301-306.
- Franklin, I. R. 1980. Evolutionary change in small populations. Pages 135-149, in M. E. Soulé and B. A. Wilcox, editors. *Conservation biology: an evolutionary-ecological perspective*. Sinauer Associates, Sunderland, MA.

Gilpin, M. E. and M. E. Soulé. 1986. Minimum viable populations: processes of species extinction. Pages 19-34 in M. E. Soulé, editor. Conservation biology: the science of scarcity and diversity. Sinauer Associates, Sunderland, MA.

Jimenez, M. 2012. Wyoming gray wolf recovery status report. U.S. Fish and Wildlife Service. [http://www.fws.gov/mountain-prairie/species/mammals/wolf/wyoming\\_wolf\\_status\\_2012/wyoming\\_wolf\\_report\\_04302012.html](http://www.fws.gov/mountain-prairie/species/mammals/wolf/wyoming_wolf_status_2012/wyoming_wolf_report_04302012.html)

Ripple, W. J., and R. L. Beschta. 2003. Wolf reintroduction, predation risk, and cottonwood recovery in Yellowstone National Park. Forest Ecology and Management 184:299-313.

Soulé, M. E., editor. 1987. Viable populations. Cambridge University Press, New York, NY.

[USFWS] U.S. Fish and Wildlife Service. 2011. Northern Rocky Mountains Wolf Recovery Program Update 2011 (M.D. Jimenez and S.A. Becker, eds.). USFWS Ecological Services, Helena, MT, 50 pp.

[USFWS] U.S. Fish and Wildlife Service. 2012. Gray wolves in the northern Rocky Mountains. <http://www.fws.gov/mountain-prairie/species/mammals/wolf/>

vonHoldt, B.M., et al. 2010. A novel assessment of population structure and gene flow in grey wolf populations of the Northern Rocky Mountains of the United States. Molecular Ecology 19: 4412-4427.