

From: Adrian Treves atreves@wisc.edu

Subject: comment on the revised Statement of Scope for Emergency Board Order WM-01-21(E), Board Order WM-02-21, and Board Order WM-03-21 for proposed rules affecting chapters NR 8, 10, 12 and 19

Date: June 16, 2021 at 11:23 AM

To: Scottr.karel@wisconsin.gov, Ross, Laurie J - DNR Laurie.Ross@wisconsin.gov



Thank you for the opportunity to comment on the revised Statement of Scope for Emergency Board Order WM-01-21(E), Board Order WM-02-21, and Board Order WM-03-21 for proposed rules affecting chapters NR 8, 10, 12 and 19 related to gray wolf harvest regulations.

In my comments dated 4 June 2021 and 15 May 2021, I presented scientific data (and evidence pointing to large gaps in scientific data), which support a moratorium on hunting at night, hunting with hounds, hunting with snowmobiles, and other unstudied or under-studied methods, until the requisite research is completed. The current Statement of Scope proposes a potential ban on night hunting, which I support. Please expand the scope of the current rulemaking process to include regulating hound hunting as well. The NRB has extensive evidence of the massive damage that hound hunting did to the wolf population and other wildlife during the February hunt, and of the widespread abuses that took place because of loopholes in the statutory limits—such as hunters combining their dogs into large teams into massive, coordinated hunts. Although I understand that it is not within the NRB's authority to ban hound hunting, it is imperative that it expand the scope of these temporary rules to impose tight regulations to prevent those abuses from recurring. For my specific comments on night-time hunting, hounding, and snowmobile pursuit, please refer to my previous two comments.^[1]

In addition to the above comments, I note the following issue with the Statement of Scope:

The DNR states that “the desired outcome of these rules is the maintenance of a healthy wolf population at an established population goal.”

This goal is impossible to achieve within the limited amount of time before the emergency rule is to be passed, because too much information that is lacking. I will address why below. I focus on two parts of the stated goal: “Maintenance of a healthy wolf population...” and “...at an established population goal.”

1. “Maintenance of a healthy wolf population”

A healthy wolf population is one in which pups survive to independence in the fall; breeders find each other to mate and rear pups; and packs maintain the cohesion and teamwork needed to defend territories, cooperatively raise pups, and hunt together in a way that fits within evolved adaptations given the bounds of socioecological conditions. Together, these identifying traits are called ecological effectiveness or functionality. Currently, we simply lack evidence that we see all of these ecological functions across packs outside of tribal reservations.

To maintain a population of any wildlife species in the state, one has to be highly certain that breeding individuals are present and have bred successfully.

For wolves, that means breeding pairs outside of tribal reservations have to have bred successfully in May or June 2021. Given the massive disruption potentially caused by the February 2021 wolf hunt on breeding wolves specifically and state-wide wolves generally, any independent and reputable scientific analysis would want evidence of successful breeding with pups surviving to the age of independence this fall. Even if pups were born in May and June, they may not survive to October 31 given the high mortality of wolf pups (Thiel et al. 2009). Therefore, as a scientist, I recommend postponing any further wolf hunting until proof of successful reproduction is found.

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That the DNR neglected to collect wolf carcasses and conduct necropsies to estimate how many breeding females were killed is only one gap in the data. Other gaps include the lack of summer howl surveys at present; the impossibility of knowing how many pups survive to independent travel in September and October; the amount of future legal, lethal control by the state; and the background mortality rate from now until November 1. These are vast gulfs in our understanding of the maintenance of this population.

I would judge a scientific analysis done with this much uncertainty to be wholly unreliable. A decision to initiate another wolf hunt under these conditions would therefore NOT be seen as based on reliable science.

Sheer speculation is not science and currently the DNR and NRB are only speculating that wolves in Wisconsin bred successfully.

That brings me to the population size estimate. My colleagues and I published this month an estimate of the decline of the wolf population since April 2020. Our most optimistic and conservative scientific model suggests the wolf population diminished 27-33% by April 2021 from 1034 to 695-751 (Treves et al. 2021a). However, we pointed out that poaching was likely more severe than we estimated, and that population growth (if any occurred) in 2020 had not been estimated accurately, because the disruption caused by the February 2021 wolf hunt precludes an accurate census.

We have unpublished models that place the wolf population as low as 350 by November 2021. If one takes into account background mortality from May-November 2021 caused by legal, lethal actions, vehicles, nonhuman causes, illegal killing, etc., the wolf population could easily fall below the state population goal of 350 and even below the listing goal of 250. We cannot be certain.

How would we know if the number of wolves fell below the state population goal? If wolves were deer, no honest, ethical hunter would allow another hunting season to take place for fear of extirpating the game population.

2. "...at an established population goal."

Managing at the state population goal of 350 wolves virtually ensures over-kill, leading to the wolf population dropping below that level. I assert this based on every past wolf hunt in Wisconsin overshooting the quota and the February 2021 wolf hunt smashing the DNR's stated intention to maintain a stable population at current levels. Presumably the DNR means above the established population goal?

I anticipate the DNR will recommend a new population goal when the management plan is finished. Until then, however, we are stuck with the state population goal of 350, which my colleagues and I have shown is not based on sound science but on flawed and misleading models, which reflect a personal or organizational value judgment generated by a compromise between a small number of individuals (Treves et al. 2021b).

We have at present no evidence that the state wolf population outside of tribal reservations has been maintained in a healthy condition or that the established population goal is achievable or science-based. I warn the state that current policy is on the way to being unscientific and guided by fabrications and wishful thinking.

Finally, don't pin your hopes on immigrant wolves from Minnesota and Michigan providing breeders or additional adults or saving the state from unwise policies. Immigrants have been

slow and scarce (Treves et al. 2009, 2017). The evidence for compensatory mortality is weak and poorly justified (Stenglein et al. 2018) and the work of the latter authors has been systematically dismantled by their own omissions and errors and by careful, reasoned approaches to the same data (Chapron & Treves 2017; Treves 2019; Santiago-Ávila et al. 2020).

References

- Chapron, G. and A. Treves, Reply to comments by Olson et al. 2017 and Stien 2017. *Proceedings of the Royal Society B*, 2017. 284(1867): p. 20171743.
- Louchouart, N.X., F.J. Santiago-Ávila, D.R. Parsons, and A. Treves, Evaluating how lethal management affects poaching of Mexican wolves *Open Science*, 2021. 8 (registered report): p. 200330. <https://doi.org/10.1098/rsos.200330>.
- Santiago-Ávila, F.J., R.J. Chappell, and A. Treves, Liberalizing the killing of endangered wolves was associated with more disappearances of collared individuals in Wisconsin, USA. *Scientific Reports*, 2020. 10: p. 13881. /10.1038. | <https://doi.org/10.1038/s41598-020-70837-x>.
- Stenglein, J.L., A.P. Wydeven, and T.R. Van Deelen, Compensatory mortality in a recovering top carnivore: wolves in Wisconsin, USA (1979–2013). *Oecologia*, 2018. 187(1): p. 99–111. <https://doi.org/10.1007/s00442-018-4132-4>.
- Thiel, R.P., W. Hall, E. Heilhecker, and A.P. Wydeven, A Disjunct Gray Wolf Population in Central Wisconsin, in *Recovery of Gray Wolves in the Great Lakes Region of the United States: an Endangered Species Success Story*, A.P. Wydeven, T.R. Van Deelen, and E.J. Heske, Editors. 2009, Springer: New York. p. 107-118.
- Treves, A., P.C. Paquet, K.A. Artelle, A.M. Cornman, M. Krofel, and C.T. Darimont, *Transparency about values and assertions of fact in natural resource management*. *Frontiers in Conservation Science: Human-Wildlife Dynamics*, 2021a. 2: p. e631998. 10.3389/fcosc.2021.631998.
- Treves, A., F.J. Santiago-Ávila, and K. Putrevu, Quantifying the effects of delisting wolves after the first state began lethal management. *PeerJ Life*, 2021b. **in press**.
- Treves, A., K.A. Martin, J.E. Wiedenhoft, and A.P. Wydeven, Dispersal of gray wolves in the Great Lakes region, in *Recovery of Gray Wolves in the Great Lakes Region of the United States: An Endangered Species Success Story*, A.P. Wydeven, T.R. Van Deelen, and E.J. Heske, Editors. 2009, Springer: New York. p. 191-204.
- Treves, A., J.A. Langenberg, J.V. López-Bao, and M.F. Rabenhorst, Gray wolf mortality patterns in Wisconsin from 1979 to 2012. *Journal of Mammalogy*, 2017. 98(1): p. 17-32. DOI:10.1093/jmammal/gyw145.
- Treves, A., R.L. Jurewicz, L. Naughton-Treves, R.A. Rose, R.C. Willging, and A.P. Wydeven, Wolf depredation on domestic animals: control and compensation in Wisconsin, 1976-2000. *Wildlife Society Bulletin*. 2002. 30: p. 231-241.

<https://www.jstor.org/stable/3784658>.

Treves, A. and L. Naughton-Treves, Evaluating lethal control in the management of human-wildlife conflict, in *People and Wildlife, Conflict or Coexistence?*, R. Woodroffe, S. Thirgood, and A. Rabinowitz, Editors. 2005, Cambridge University Press: Cambridge, UK. p. 86-106.

Treves, A., Peer review of the proposed rule and draft biological report for nationwide wolf delisting, U.S.F.W.S. Department of Interior, Editor. 2019, Department of Interior, U.S. Fish & Wildlife Service: Washington, D.C. https://www.fws.gov/endangered/esa-library/pdf/Final%20Gray%20Wolf%20Peer%20Review%20Summary%20Report_053119.pdf.

[1] For the full text of the 7 June comment, [click here](#).

For the full text of the 15 May comment, [click here](#).

For the appendices [click here](#) and for references cited [click here](#).

For an upcoming analysis of the effect of the February 2021 wolf-hunt [click here](#).

For a January 2021 public comment sent to tribal and Wisconsin state officials [click here](#).

apologies for typos

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The University of Wisconsin–Madison occupies ancestral Ho-Chunk land, a place their nation has called Teejop (day-JOPE) since time immemorial.

In an 1832 treaty, the Ho-Chunk were forced to cede this territory.

Decades of ethnic cleansing followed when both the federal and state government repeatedly, but unsuccessfully, sought to forcibly remove the Ho-Chunk from Wisconsin.

This history of colonization informs our shared future of collaboration and innovation.

Today, UW–Madison respects the inherent sovereignty of the Ho-Chunk Nation, along with the eleven other First Nations of Wisconsin.

