

## MEMO

DATE: 8 April 2021

TO: Randy Johnson, Wisconsin DNR, to share with the state Wolf Advisory Committee

FROM: Adrian Treves, University of Wisconsin-Madison

SUBJECT: Lack of science to guide wolf management

The state should not hold another wolf-hunt in November 2021 for many reasons.

One reason is legal and pertains to the scarcity of necessary information. Statute, Wisconsin Supreme Court common law, and the state constitution demand in one way or another that decisions about public trust assets be based on defensible science if not the best available science.

The risks of mis-stepping at this point include weakening the state wolf population so much that state, tribal, or federal governments have to intervene to prevent local extinctions. Another risk is that the reputations of the state and its bodies including your own committee become so tarnished that the governor, the legislature or the courts intervene to change how you work.

The Department and independent scientists need time to collect information before the state holds another wolf hunt.

We are currently missing three essential pieces of information. In the following statements, assertions of fact are substantiated by peer-reviewed best available science found here: <http://faculty.nelson.wisc.edu/treves/publications.php>

1. A peer-reviewed estimate of the current wolf population size.
2. A peer-reviewed estimate of how many pups (or their mothers) survived the February wolf-hunt, so we can estimate the sustainable off-take before falling below the population goal.
3. A peer-reviewed estimate of how much unreported and unregulated wolf-killing is occurring between now and November and how much likely occurred under the unstudied conditions of hounding, night-time hunting, and snow-mobile pursuit.

### Regarding 1

Recent statements by the DNR indicate how little agreement there is within the agency about the current status. "The Department of Natural Resources reported at 4 p.m. Wednesday [23 February 2021] that hunters had registered 182 wolves since the hunt began Monday, or about 15% of the estimated population." ([LINK](#)), which means the DNR was initially using 1213 as the population estimate. Later DNR Secretary Preston Cole claimed the population estimate was actually 1195 in an official document submitted to the Natural resources Board ([LINK](#)). He seems to be citing an unpublished study. Well which is it, 1213 or 1195? Neither. The official state population estimate for April 2020 was 1034-1057 by the DNR's own report ([LINK](#), see Table 3).

My lab estimates the current wolf population was lowered AT LEAST 27-33% since April 2020 and likely even more as I explain below.

Regarding 2.

Because of the timing of the wolf-hunt and the novel methods used (snow-mobiles, hounding, night-time), we do not know how many females survived the hunt to breed. A precautionary approach would suggest only the packs on protected land will breed this year. That fact alone could drive our population down close to the obsolete state population goal by November 2021.

Regarding 3.

Illegal and unreported wolf-killing exceeded all other causes of death in every wolf population studied. In an Alaskan study, unreported take was 74% of all harvested wolves (Adams et al. 2008. Population dynamics and harvest characteristics of wolves in the Central Brooks Range, Alaska. Wildlife Monographs 170:1-25.) This is the same study the DNR used to justify its claim that 28% harvest was sustainable (a claim by the way that is hard to defend scientifically for Wisconsin, because it requires estimating all human-caused mortality including cryptic poaching). If Wisconsin reached that level of unreported killing in February 2021, the state population will already be below the population goal and reproduction is likely to be limited to a handful of packs in 2021.

This possibility is not far-fetched because we already know that the cumulative incidence of illegal killing during periods without strict federal protections were nearly that high. Specifically, 60% of all radio-collared Wisconsin wolves eventually died from suspected poaching during past periods without strict federal protection of wolves.

I am happy to explain any and all of the scientific assertions I made above in writing or in person. All are based on peer-reviewed, transparent, and replicable science ([LINK](#)).

Opinions cannot replace peer-reviewed, transparent, reproducible science when making a decision on trust assets and the public good.

Therefore, I recommend the state postpone any wolf-hunt until all the information described above is collected and subject to peer review and validation by independent scientists.