## Using basic principles of wildlife management to evaluate the prospects for a public wolf harvest in Michigan 1 May 2013

This statement by Drs. John Vucetich (javuceti@mtu.edu) and Rolf Peterson (ropeters@mtu.edu) is respectfully submitted as written testimony for hearings involving the Natural Resource Commission that are related to wolf hunting in Michigan and to be held in early May 2013. John Vucetich is an Associate Professor of Wildlife Ecology and Rolf Peterson is Research Professor of Wildlife Ecology. Each of us has authored more than 75 scholarly publications on a range of topics, including wolf-prey ecology and the human-dimensions of natural resource management. We express the views below as citizens of Michigan with that expertise. These views are not necessarily those of our employer.

The North American Model of Wildlife Management (NAM) is a philosophy of wildlife management held in high regard by many hunting organizations, wildlife professionals, and state agencies. A central component of the NAM is a set of seven principles<sup>1</sup>:

#1 - Wildlife is Held in the Public Trust

#2 - Elimination of Markets for Game

#3 - Principles of Democracy

#4 – Hunting Opportunity for All

#5 - Non-Frivolous Use

#6 - International Resources

#7 – Best-available science

We oppose the proposed plans for a public harvest of wolves in Michigan because they violate basic principles of the NAM, in a manner explained below.

A) Good wildlife management must provide good answers to this set of questions: (i) **What** is the purpose and goal of management? (ii) **How** will that purpose and goal be accomplished?, and (iii) **Why** is that purpose and goal appropriate? What, how, and why?

The science of wildlife management is primarily responsible for establishing *how* management goals are to be accomplished. Wildlife professionals certainly have a responsibility to provide leadership in explaining to stakeholders *why* the purpose or goal of any particular management is good or bad. However, citizens working through (and constrained by) fundamental principles of democracy have ultimate responsibility for judging what is good or bad for a society.

Expressed somewhat more generally, science can inform us about the range of management actions that are possible in a technical sense, but science does not tell us what is wrong or right, good or bad. Judgments about good and bad are not and never have been the purview of science. In a free society, democratic principles represent the *best chance* for understanding the collective good.

For these reasons, the best available scholarship clearly indicates that good wildlife management is a judicious balance between science *and* democracy. The need to honor science *and* democracy are also highlighted by the NAM (Principles #3 and #7).

<sup>&</sup>lt;sup>1</sup> These principles have been written about by various proponents of the NAM. They are not always numbered in the same way. This particular ordering and wording comes from the Rocky Mountain Elk Foundation (http://www.rmef.org/Conservation/HuntingIsConservation/NorthAmericanWildlifeConservationModel.aspx).

B) Advocates of wolf hunting claim that wolf hunting is supported by the best-available science. This misrepresents the role of science.

The best-available science clearly indicates that we have the technical ability to manage a wolf hunt without endangering the population viability of Michigan wolves. But there is no science that concludes it is *necessary* to hunt wolves in Michigan.

The misrepresentation of science played an important large role in the passage of Public Act 520 and Senate Bill 288, which serve the legal-political effort to make wolf hunting a legal and political possibility<sup>2</sup>.

C) In many cases, the reasons for *why* a particular wildlife management goal is appropriate are straightforward, uncontroversial, and aptly handled by wildlife professionals without much effort. Wolf hunting in Michigan appears *not* to be one of those cases.

More than a quarter million Michigan citizens signed a petition to repeal PA250. All expectations are that PA250 will be on the ballot for repeal in November 2014. Advocates of wolf hunting have objected to that referendum process on grounds that it involved the use of resources from outside the state of Michigan. That concern seems disingenuous for two reasons. First, advocates of wolf hunting have also relied on resources from outside the state to advance their cause.

Second, experience indicates that Michiganders have a genuine and independent interest to exercise their responsibility as stakeholders in wildlife management. For example, Michigan voters overwhelmingly rejected a law, in 2006, that allowed for the sport hunting of mourning doves. Voters rejected the measure in all 83 counties, including all rural counties where participation in hunting is greatest. Michigan citizens cast more votes against the shooting of mourning doves than they did for any candidate in that election.

Wildlife professionals tend to disparage wildlife management by referenda, on grounds that the public is not adequately qualified to make scientific decisions. Judging whether we should allow wolf hunting is, for the most part, a value judgment, not a scientific judgment (see point A). Moreover, the referendum process is a kind of antidote to cases where wildlife professionals fail to provide adequate leadership on value judgments. The outcome of that referendum process is not a foregone conclusion. If hunting wolves is a good idea, advocates of wolf hunting have more than a year to make that case to the citizens of Michigan.

The NAM indicates that wildlife is held in the public trust (Principle #1), which means that all citizens, hunters and non-hunters alike, are stakeholders in the management of wildlife. Clearly, a broad segment of Michigan citizens would like to exercise their responsibility as stakeholders in the management of wildlife. Implementing a wolf hunt, while that referendum process is in play, is to dismiss Principles #1 and #3 of the NAM<sup>3</sup>.

<sup>&</sup>lt;sup>2</sup> P.A. 520 makes the wolf a game species, which is a prerequisite to implementing a public harvest on wolves. S.B. 288 is portrayed as a bill that would make wildlife management more scientific. However, the motivation for that bill seems to thwart the democratic processes that would put P.A. 520 up for referendum.

<sup>&</sup>lt;sup>3</sup> Long before the NAM had ever been articulated, President Theodore Roosevelt, who was a powerful advocate of hunting and conservation, also championed the American institution that is the referendum process.

- D) Items (A), (B), and (C) indicate how plans for wolf hunting in Michigan, and political activities leading to those plans, depend on misrepresenting the purview of science, dishonor the proper role of democracy, and fail to treat wolves as a public trust. In doing so, plans to hunt wolves in Michigan violate principles #1, #3, and #7 of the NAM.
- E) According to the memo from MI-DNR to the Natural Resource Commission (April 2<sup>nd</sup>, 2013) which describes the plan for wolf hunting, one of two stated purposes for hunting wolves is to protect human safety.
- (i) In particular, the memo indicates that a wolf harvest is required in wolf management unit A because the MI-DNR had received 93 complains of nuisance wolves since 2010. The number of complaints is <u>not</u> an appropriate indicator of threats to human safety or a sensible basis for judging when or where human safety is threatened.

One problem is that many people's perception of a threat is at gross odds with the reality of a threat. The memo fails to recognize the best-available science, which is abundantly clear: genuine threats to human safety by wolves are exceedingly rare. Recognizing and dealing with public perceptions about human safety is critically important. However, treating perception as reality, when the best-available science indicates otherwise is poor wildlife management and counter productive to solving the problem.

Recognizing genuine threats to human safety and communicating the true nature of those threats to the public is an essential element to protecting human safety. The memo fails to accomplish this basic requirement. If effective and transparent protection is important, then the memo reflects an unmet obligation to develop an appropriate means of evaluating and reporting threats to human safety.

- (iii) Genuine threats to human safety do occur, and when they occur, had better be dealt with immediately, precisely, and thoroughly. Protecting human safety cannot wait until the upcoming hunting season, with the subsequent hope that some hunter has the good fortune to kill the offending wolf. If genuine human safety concerns are dealt with appropriately (i.e., immediately, precisely, thoroughly), then offending and potentially offending wolves would either be dead or living with plenty of fear of humans by the time the next hunting season rolls around. We are unaware of good scientific reasoning to believe that harvest is a sensible way to promote human safety in any appreciable manner.
- (iv) Even if the number of complaints was a useful indicator of threats to human safety, and even if a public harvest was adequate means of addressing those threats, the harvest plans are inadequate for failing to indicate how success or failure would be evaluated. For example, would a decline in the number of complaints indicate that the hunt had been effective and no longer necessary? Or would a decline in the number of complaints indicate that the hunt has been effective and thereby justify the need for more hunting to further reduce complaints? The lack of criteria for evaluation raises concern that harvests in subsequent years will have higher harvest rates and expanded geographic scope, without any reasonable justification<sup>4</sup>.
- (v) As mentioned above, the memo suggests that a wolf harvest is required in wolf management unit A because the MI-DNR had received 93 complains of nuisance wolves since 2010. However, the memo fails to adequately evaluate how the number of complaints may have been declining dramatically after some offending wolves had been dealt with appropriately.

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<sup>&</sup>lt;sup>4</sup> This concern is further justified with point (G) on the next page.

If complaints are on the decline, as may be the case, that decline may be attributable to people becoming more comfortable with living near wildlife. People may be coming to realize that most sightings of a wolf do not constitute a threat. That would be a desirable development. Instituting a public harvest at this time would likely work against that development, by encouraging the belief that wolves are more dangerous than is the case and that a public harvest is a useful means of protecting human safety.

In summary, the plan mishandles the most basic issues of human safety. It fails to recognize that genuine threats to human safety are exceedingly rare, are not suitably indicated by the number of nuisances complaints, and must be dealt with immediately, precisely, thoroughly – in a manner that cannot be accomplished by a general harvest.

- F) According to the memo, the second of the two stated purposes for hunting wolves is to protect livestock.
- (i) Most livestock losses occur during spring and summer, not during the time when wolves would be hunted. Livestock losses should be dealt with appropriately (i.e., swiftly, precisely, thoroughly, and at the proper time of year). If they are, then we do not understand the scientific reasoning for believing that a public hunt is an appropriate way to protect livestock in any appreciable manner.

But we do have some concerns that harvesting could exacerbate losses to livestock. That concern rises from the likely effect of a harvest to increase the number of dispersing wolves in areas where livestock are raised. Dispersing wolves that have not been acculturated to living in areas with livestock may be more likely to kill livestock.

- (ii) The memo implies that the *goal* of the harvest is to reduce the annual number of livestock lost to wolves. If, for example, livestock losses were to decline would that indicate the harvest had been successful and no longer necessary? Or would a decline in number of complaints indicate that the hunt has been partially effective and thereby justify the need for more hunting to further reduce complaints? The plan is inadequate for failing to indicate how a wolf hunt would be evaluated in terms of its success or failure.
- (iii) The memo aims to justify a wolf hunt on grounds that 80 livestock were reported to have been killed by wolves since 2010 in management unit B. But the memo did not explain how, during that period of time, most of those losses occurred from a single farm. Failure to discuss how and why this is the case is to provide a misleading justification for wolf hunting.
- G) The technical deficiencies described in points F and G represent a failure to provide an adequate answer to the question, *How will the purpose of the proposed management be accomplished*? Failure to answer that question is, in general, an important kind of management failure. In this particular case, it is also a serious shortcoming of the proposal. This shortcoming creates a risk, for subsequent years, of increasing the geographic scope and intensity of wolf harvest without adequate justification. Something similar happened, for example, with bear management in Alaska, where inadequate plans for evaluation have led to levels of bear harvest that several retired state biologists consider totally irresponsible<sup>5</sup>.

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<sup>&</sup>lt;sup>5</sup> Miller et al. 2011. Trends in intensive management of Alaska's grizzly bears, 1980-2010. Journal of Wildlife Management 75:1243-1252

H) Wildlife Services (USDA-APHIS) has made vital contributions in protecting human safety and livestock from wolves. Wildlife services would almost certainly offer more important and effective protection than could ever be expected from a public wolf harvest. If protection of human safety and livestock were important and genuine motivations for harvesting wolves, then the State of Michigan should ensure adequate support for the kind of professional services provided by Wildlife Services (USDA-APHIS). Nevertheless, it does not appear as though the state of Michigan has been planning to continue funding Wildlife Services for their efforts to manage wolves.

I) The poverty of stated reasons for hunting wolves suggests that other reasons provide the motivation to hunt wolves. There are good reasons to believe that one unstated reason to hunt wolves in Michigan is because a tiny, vocal minority of citizens hate wolves. Hatred is no friend of hunting. Never in the history of Michigan (perhaps the United States) has a recreational harvest of any species been motivated by hatred.

That hatred is generally fueled by perceptions of wolves, their behavior, and their influence on prey and the environment – perceptions that are at gross odds with scientific knowledge about wolves. While recognizing and dealing with public perceptions is important, for a public harvest to be strongly connected to such misunderstanding is poor wildlife management.

J) Participation in hunting has been on the decline for decades and that decline is expected to continue. The future role of hunting in America depends critically on the hunting community being able to explain to non-hunters why hunting is valuable to our culture and to conservation. The best available sociological science indicates that non-hunters tend to be strong advocates for hunting, if they are given adequate reasons for why a particular form of hunting is appropriate. This obligation to provide good reasons for any particular kind of hunt is an obligation that responsible hunters impose upon themselves. In particular this obligation is memorialized in the NAM, principle #5 which states that wildlife should not be killed for "frivolous use." Stated more straightforwardly, we should not kill a living creature without an adequate reason. This document offers plenty of evidence to think that advocates of wolf hunting in Michigan have not offered adequate reasons.

<u>CONCLUSION</u>: For the reasons explained here, wolf hunting in Michigan, as it has been pursued and planned to date, violates four principles of the NAM (#1, #3, #5, and #7). Given these circumstances, moving forward with a wolf harvest will cause non-trivial damage to the good honor of hunting and wildlife management.

Perhaps in time, good reasons for hunting wolves will be articulated. Perhaps in time, it will be possible to develop a harvest plan that honors whatever those reasons might be. But we have not yet reached that point.