

April 13, 2023

Senate Committee on Environment, Climate, and Legacy Minnesota Senate Building, Room 1150 St. Paul, MN 55155

RE: SF 2062/HF 2144 Letter of Support

Chair Hawi, Vice Chair McEwen, Ranking Member Eichorn, and Members of the Committee:

My name is Zack Eichten and I am the Minnesota State Director for the Humane Society of the United States. On behalf of our members and supporters in Minnesota, thank you for this opportunity to write in support of SF 2062/HF 2144, a bill to prohibit the trophy hunting and trapping of wolves. While wolves in Minnesota were relisted as "threatened" under the federal Endangered Species Act on February 10, 2022, it is possible they could be delisted again. Bills have already been introduced in Congress that aim to remove federal protections for wolves in the Great Lakes region. That is why it is imperative that Minnesota prohibit these controversial practices now.

Recreational wolf hunting and trapping conflict with the best available science, public values, and ethics. Scientific research demonstrates that trophy hunting and trapping wolves can cause a cascade of harms that ripple through a population. Killing a single wolf can result in the loss of *entire packs* by causing the death of dependent offspring and disrupting the pack's social structure.<sup>1</sup> Recent studies have also found that killing wolves can have negative consequences for pack persistence and reproduction.<sup>2</sup> And killing fit adult wolves can harm population genetics and potentially affect evolution. Scientists observed these consequences, including decreased dispersal and gene flow and elevated mortality of dispersing wolves, after Minnesota's 2012 season.<sup>3</sup>

Trophy hunting and trapping of wolves is not necessary to "control" their population; in Minnesota and Michigan, empirical evidence shows us that wolves have maintained a stable population for the past 10 years in the absence of recreational hunting or trapping. And it will not reduce conflicts with livestock or increase numbers of game animals like deer. Like all apex carnivores, wolves self-regulate their own populations. Moreover, scientific studies and data

<sup>&</sup>lt;sup>1</sup> Ausband, David & Stansbury, Carisa & Stenglein, Jennifer & Struthers, J & Waits, Lisette & Correspondence, David & Ausband. (2015). Recruitment in a social carnivore before and after harvest. Animal Conservation. 18. 10.1111/acv.12187.

<sup>&</sup>lt;sup>2</sup> Cassidy, Kira A, Bridget L Borg, Kaija J Klauder, Mathew S Sorum, Rebecca Thomas-Kuzilik, Sarah R Dewey, John A Stephenson, *et al.* "Human-Caused Mortality Triggers Pack Instability in Gray Wolves." *Frontiers in Ecology and the Environment* (2023).

<sup>&</sup>lt;sup>3</sup> Rick, J. A., Moen, R., Erb, J. D., & Strasburg, J. L. (2017). Population structure and gene flow in a newly harvested gray wolf (Canis lupus) population. *Conservation Genetics*, *18*(5), 1091-1104. https://doi.org/10.1007/s10592-017-0961-7



from state and federal agencies show that wolves cause very few livestock losses.<sup>4</sup> According to the Minnesota DNR, less than 2% of livestock farms in areas where wolves live in Minnesota experience livestock-wolf conflicts each year. Indiscriminately killing wolves in a recreational hunt in the fall is not an effective means to solve the rare livestock-wolf conflicts that occur, most often in the spring. In fact, by disrupting their stable family structures, killing wolves can increase livestock predation. The best remedies are preventive: non-lethal deterrents such as prompt carcass removal, fencing and flagged fencing, known as "fladry," livestock guardian animals, and other proactive measures.

Additionally, numerous studies demonstrate that killing wolves generally had no effect in the long term on populations of ungulates like deer and elk.<sup>5</sup> Weather, disease, and habitat loss all play a much greater role in those species' population declines.<sup>6</sup> Human hunters cause the greatest number of deer mortalities<sup>7</sup> statewide, while harsh winters are the primary cause of natural mortality, particularly in northeastern Minnesota.

The DNR states that health-related causes account for two-thirds of the adult moose mortality, and brainworm is the leading cause of health-related fatalities. A 2017 DNR study found that at least 40% of the moose killed by wolves had other serious health issues that may have predisposed them to predation.<sup>8</sup> Researchers also find that moose are declining in population in some places because of disease and a warming climate, to which they are maladapted.<sup>9</sup> With the loss of moose, deer will expand and even exacerbate their spread of diseases harmful to moose, further stressing moose populations in a downward spiral.<sup>10</sup> And with high deer densities, forests have reduced tree seedlings and more invasive species, and this in turn could harm forest bird communities.<sup>11</sup> Fortunately, recent research by the Michigan DNR, Wisconsin DNR,

<sup>&</sup>lt;sup>4</sup> Peter Kareiva et al., "A new era of wolf management demands better data and a more inclusive process," *Conservation Science and Practice* (2022), https://conbio.onlinelibrary.wiley.com/doi/abs/10.1111/csp2.12821; The Humane Society of the United States, "Government data confirm that wolves have a negligible effect on U.S. cattle and sheep industries," https://www.humanesociety.org/sites/default/files/docs/HSUS-Wolf-Livestock-6.Mar\_.19Final.pdf (2019).

<sup>&</sup>lt;sup>5</sup> See e.g., T. J. Clark and Mark Hebblewhite, "Predator control may not increase ungulate populations in the future: A formal meta-analysis," *Journal of Applied Ecology* 58, no. 4 (2021), https://besjournals.onlinelibrary.wiley.com/doi/abs/10.1111/1365-2664.13810.

<sup>&</sup>lt;sup>6</sup> See e.g., H. E. Johnson et al., "Human development and climate affect hibernation in a large carnivore with implications for human-carnivore conflicts," *Journal of Applied Ecology* 55, no. 2 (2018).

<sup>&</sup>lt;sup>7</sup> Chris T. Darimont et al., "The unique ecology of human predators," *Science* 349, no. 6250 (2015).

<sup>&</sup>lt;sup>8</sup> Carstensen, Michelle, Hildebrand, Erik C., Plattner, Dawn, Dexter, Margaret, St-Louis, Véronique, Jennelle, Christopher, and Wright, Robert G. "Determining Cause-Specific Mortality of Adult Moose in Northeast Minnesota, February 2013-July 2017." Minnesota Department of Natural Resources and Wildlife Restoration. https://files.dnr.state.mn.us/wildlife/research/summaries/health/2016\_moose-mortality.pdf

<sup>&</sup>lt;sup>9</sup> Bump, Joseph K. "Fertilizing Riparian Forests: Nutrient Repletion across Ecotones with Trophic Rewilding." *Philosophical Transactions of the Royal Society B: Biological Sciences* 373, no. 1761 (2018/12/05 2018): 20170439; Sarah Hoy, Rolf Peterson, and John Vucetich, *Climate Warming Is Associated with Smaller Body Size and Shorter Lifespans in Moose near Their Southern Range Limit*, vol. 24 (2017), p. 2488.

<sup>&</sup>lt;sup>10</sup> Weiskopf, Sarah R., Olivia E. Ledee, and Laura M. Thompson. "Climate Change Effects on Deer and Moose in the Midwest." *The Journal of Wildlife Management* 0, no. 0 (2019/03/03 2019).

<sup>11</sup> Ibid.



the University of Notre Dame and others finds that wolves benefit forest regeneration and the forest industry by regulating deer browse.<sup>12</sup>

Wolves are very good at identifying vulnerable prey, and tend to target individuals that are old, young, sick, or otherwise weakened. They prefer to prey upon deer who are already in poor health or otherwise compromised. As such, wolf predation can limit or even prevent transmission of Chronic Wasting Disease and other diseases.

Finally, Minnesotans value wolves. A 2019 study conducted by the Minnesota Department of Natural Resources (DNR) in partnership with the University of Minnesota found that more than two-thirds of residents have a positive attitude toward wolves, and nearly 9 out of 10 agree that it is important to maintain a wolf population in Minnesota. Furthermore, 86% of residents said they would like to see the same number or more wolves in Minnesota. More residents oppose a wolf trophy hunting season than support it, and 58% of residents oppose a wolf-trapping season.

For all of these reasons, I urge you to support SF 2062/HF 2144. Thank you.

Zack Eichten Minnesota State Director zeichten@humanesociety.org

<sup>&</sup>lt;sup>12</sup> Callan, R., Nibbelink, N. P., Rooney, T. P., Wiedenhoeft, J. E., & Wydeven, A. P. (2013). Recolonizing wolves trigger a trophic cascade in Wisconsin (USA). *Journal of Ecology, 101*(4), 837-845; Flagel, D. G., Belovsky, G. E., & Beyer, D. E. (2016). Natural and experimental tests of trophic cascades: gray wolves and white-tailed deer in a Great Lakes forest. *Oecologia, 180*, 1183-1194.

<sup>&</sup>lt;sup>13</sup> J. A. Vucetich, D. W. Smith, and D. R. Stahler, "Influence of harvest, climate and wolf predation on Yellowstone elk, 1961-2004," *Oikos* 111, no. 2 (2005), <Go to ISI>://WOS:000232979300007.

<sup>&</sup>lt;sup>14</sup> Ellen E. Brandell et al., "Examination of the interaction between age-specific predation and chronic disease in the Greater Yellowstone Ecosystem," *Journal of Animal Ecology* (2022), https://besjournals.onlinelibrary.wiley.com/doi/abs/10.1111/1365-2656.13661.

<sup>&</sup>lt;sup>15</sup> Minnesota Cooperative Fish and Wildlife Research Unit, Minnesota Department of Natural Resources: Minnesotans' Attitudes Toward Wolves and Wolf Management. https://files.dnr.state.mn.us/fish\_wildlife/wildlife/wolves/attitude\_report\_final.pdf