



THE HUMANE SOCIETY
OF THE UNITED STATES

Testimony By: Barry Londeree
Presented To: House Committee on Natural Resources, Fish and Wildlife
In Support Of: H.60, An act relating to the hunting of coyotes
Date: February 17, 2017

Dear Chairman Deen and Honorable Committee Members,

My name is Barry Londeree. I am the Vermont State Director for The Humane Society of the United States (HSUS), and I appreciate the opportunity to submit testimony in support of H.60 and suggest some improvements to the bill that would result in a much more comprehensive and useful report on coyote hunting.

Coyotes are an integral part of healthy ecosystems, providing a number of free, natural ecological services. For example, coyotes help to control disease transmission, keep rodent populations in check, clean up carrion (animal carcasses), increase biodiversity, remove sick animals from the gene pool, and protect crops. Coyotes balance their ecosystems and have trophic cascade effects such as indirectly protecting ground-nesting birds from smaller carnivores and increasing the biological diversity of plant and wildlife communities.¹

The evidence is clear: over 100 years of coyote exploitation has not reduced their populations. In fact, since 1850 when mass killings of coyotes began, coyotes' range has tripled in the United States.² As the University of Illinois points out, "...coyote population reduction (removing some or all of the coyotes in an area) is usually unrealistic and always temporary."³ In fact, the indiscriminate killing of coyotes can stimulate increases in their populations by disrupting their social structure, which, ironically, encourages more breeding and migration, and ultimately results in more coyotes.⁴

The alpha pair in a pack of coyotes is normally the only one that reproduces. When one or both members of the alpha pair are killed, other pairs will form and reproduce. At the same time, lone coyotes will move in to mate, young coyotes will start having offspring sooner, and litter sizes will grow.⁵ While widespread killing may temporarily reduce coyote numbers, coyotes bounce back quickly, even when up to 70 percent of their numbers are removed.⁶

In addition, the killing of coyotes will not reduce conflicts with humans, pets, or livestock or increase populations of game animals.

- **Disrupting the coyote family structure may actually increase conflicts.** Exploited coyote populations tend to have younger, less experienced coyotes, increased numbers of yearlings

reproducing, and larger litters. Feeding pups is a significant motivation for coyotes to switch from killing small and medium-sized prey to killing sheep.⁷

- **Open hunts do not target specific, problem-causing coyotes.** Most killing contests target coyotes in woodlands and grasslands who are keeping to themselves—not coyotes who have become habituated to human food sources such as unsecured garbage, pet food, or livestock carcasses (left by humans).
- **Prevention—not lethal control—is the best method for minimizing conflicts with coyotes.** Eliminating access to easy food sources, such as bird seed and garbage, supervising pets while outside, and keeping cats indoors reduces conflicts with pets and humans. Practicing good animal husbandry and using strategic nonlethal predator control methods to protect livestock (such as electric fences, guard animals, and removing dead livestock) are more effective.⁸
- **Indiscriminate killing of coyotes does not increase game populations.**
 - The best available science demonstrates that killing native carnivores to increase ungulate populations, such as deer, is unlikely to produce positive results because the key to ungulate survival is protecting breeding females and access to adequate nutrition, not predation.⁹
 - Comprehensive studies, including those conducted in Colorado¹⁰ and Idaho,¹¹ show that killing native carnivores fails to grow deer herds. In recent studies that involved predator removal, those removals had no beneficial effect for mule deer.¹²
 - In recommending against a year-round hunting season on coyotes, the New York State Department of Environmental Conservation based their decision in part on the fact that “...random removal of coyotes resulting from a year-round hunting season will not: (a) control or reduce coyote populations; (b) reduce or eliminate predation on livestock; or (c) result in an increase in deer densities.”¹³

Proponents of the indiscriminate killing of coyotes often rely on exaggerated claims that coyotes attack humans, threaten livestock, and diminish game populations. Anecdotal incidents are blown out of proportion to make coyotes a convenient scapegoat to justify killing them in large numbers. Coyote attacks on humans are exceedingly rare, and according to USDA data, livestock losses to native carnivores are minuscule. In 2010, U.S. cattle and sheep lost to all carnivores combined (including coyotes, domestic dogs, wolves, cougars, bobcats, vultures, and bears) was just 0.5 percent of the total inventory. The largest source of mortality to livestock, by far, is from disease, illness, birthing problems, and weather.¹⁴

Coyotes also have minimal impact on game animals. While coyotes have a diverse diet, their favorite prey are rabbits and rodents.¹⁵ The Pennsylvania Game Commission recently stated that “practices such as forestry and farming dictate the abundance of small game, not predators.”¹⁶ The impact of larger game species is also marginal. A study by the New York State Department of Environmental Conservation found that on the whole, data indicated that deer numbers were growing in the presence of well-established coyote populations. Further, it found that it is “...only when other factors, such as poor habitat, harsh winters, and other forms of predation are severe and chronic that coyote predation limits the growth of a deer population...” on a localized basis.¹⁷

For all of these reasons, it is time for Vermont to reevaluate its outdated and unscientific policy of allowing coyote hunting 365 days per year, night and day, with virtually no regulations. H.60 is an important step in the right direction, but it is critical that all the important questions and considerations be included in the report. I believe this review needs to contemplate more information, not less; more viewpoints, not fewer. Importantly, the report should include:

1. The findings of ongoing research that evaluate the importance of native carnivores to healthy ecosystems and the impact of hunting on pack stability and behavior.
2. Kill data from recent years and an explanation of the method used to develop the population estimate.
3. Consideration of the whether the current open season reflects the principles of the North American Wildlife Conservation Model and if it leads to wanton waste or unethical hunter behavior.

Proposed changes to the bill that reflect these priorities have been developed by the Vermont Coyote Coexistence Coalition and are submitted along with this testimony. These changes will make the report a more comprehensive and useful document, and I ask that you incorporate them into the final bill.

Thank you for your consideration of this testimony and your Committee's attention to this important legislation.

¹ S. E. Henke and F. C. Bryant, "Effects of Coyote Removal on the Faunal Community in Western Texas," *Journal of Wildlife Management* 63, no. 4 (1999); K. R. Crooks and M. E. Soule, "Mesopredator Release and Avifaunal Extinctions in a Fragmented System," *Nature* 400, no. 6744 (1999); E. T. Mezquida, S. J. Slater, and C. W. Benkman, "Sage-Grouse and Indirect Interactions: Potential Implications of Coyote Control on Sage-Grouse Populations," *Condor* 108, no. 4 (2006); N. M. Waser et al., "Coyotes, Deer, and Wildflowers: Diverse Evidence Points to a Trophic Cascade," *Naturwissenschaften* 101, no. 5 (2014).

² Robert Crabtree and Jennifer Sheldon, "Coyotes and Canid Coexistence in Yellowstone," in *Carnivores in Ecosystems: The Yellowstone Experience*, ed. T. Clark et al. (New Haven [Conn.]: Yale University Press, 1999)

³ University of Illinois Extension. *Living with Wildlife in Illinois: Coyote*. University of Illinois at Urbana-Champaign, http://web.extension.illinois.edu/wildlife/directory_show.cfm?species=coyote.

⁴ F. F. Knowlton, E. M. Gese, and M. M. Jaeger, "Coyote Depredation Control: An Interface between Biology and Management," *Journal of Range Management* 52, no. 5 (1999); Robert Crabtree and Jennifer Sheldon, "Coyotes and Canid Coexistence in Yellowstone," in *Carnivores in Ecosystems: The Yellowstone Experience*, ed. T. Clark et al. (New Haven [Conn.]: Yale University Press, 1999); J. M. Goodrich and S. W. Buskirk, "Control of Abundant Native Vertebrates for Conservation of Endangered Species," *Conservation Biology* 9, no. 6 (1995).

⁵ Knowlton, F.F. 1972. Preliminary interpretations of coyote population mechanics with some management implications. *J. Wildl. Manage.* 36:369-382.

⁶ Connolly, G.E. 1978. Predator control and coyote populations: a review of simulation models. Pages 327-345 in M. Bekoff, ed. *Coyotes: biology, behavior, and management*. Academic Press, New York, N.Y.

⁷ F. F. Knowlton, E. M. Gese, and M. M. Jaeger, "Coyote Depredation Control: An Interface between Biology and Management," *Journal of Range Management* 52, no. 5 (1999); B. R. Mitchell, M. M. Jaeger, and R. H. Barrett, "Coyote Depredation Management: Current Methods and Research Needs," *Wildlife Society Bulletin* 32, no. 4 (2004).

⁸ Adrian Treves et al., "Forecasting Environmental Hazards and the Application of Risk Maps to Predator Attacks on Livestock," *BioScience* 61, no. 6 (2011); Philip J. Baker et al., "Terrestrial Carnivores and Human Food Production: Impact and Management," *Mammal Review* 38, (2008); A. Treves and K. U. Karanth, "Human-Carnivore Conflict and Perspectives on Carnivore Management Worldwide," *Conservation Biology* 17, no. 6 (2003); J. A. Shivik, A. Treves, and P. Callahan, "Nonlethal Techniques for Managing Predation: Primary and Secondary Repellents," *Conservation Biology* 17, no. 6 (2003); N. J. Lance et

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- al., "Biological, Technical, and Social Aspects of Applying Electrified Fladry for Livestock Protection from Wolves (*Canis Lupus*)," *Wildlife Research* 37, no. 8 (2010); Andrea Morehouse and Mark Boyce, "From Venison to Beef: Seasonal Changes in Wolf Diet Composition in a Livestock Grazing Environment," *Frontiers in Ecology and the Environment* 9, no. 8 (2011).
- ⁹ Bishop, C. J., G. C. White, D. J. Freddy, B. E. Watkins, and T. R. Stephenson. 2009. Effect of Enhanced Nutrition on Mule Deer Population Rate of Change. *Wildlife Monographs*:1-28; Hurley, M. A., J. W. Unsworth, P. Zager, M. Hebblewhite, E. O. Garton, D. M. Montgomery, J. R. Skalski, and C. L. Maycock. 2011. Demographic Response of Mule Deer to Experimental Reduction of Coyotes and Mountain Lions in Southeastern Idaho. *Wildlife Monographs*:1-33.; Forrester, T. D. and H. U. Wittmer. 2013. A review of the population dynamics of mule deer and black-tailed deer *Odocoileus hemionus* in North America. *Mammal Review* 43:292-308.; Monteith, K. L., V. C. Bleich, T. R. Stephenson, B. M. Pierce, M. M. Conner, J. G. Kie, and R. T. Bowyer. 2014. Life-history characteristics of mule deer: Effects of nutrition in a variable environment. *Wildlife Monographs* 186:1-62.
- ¹⁰ Bishop, C. J., G. C. White, D. J. Freddy, B. E. Watkins, and T. R. Stephenson. 2009. Effect of Enhanced Nutrition on Mule Deer Population Rate of Change. *Wildlife Monographs*:1-28.
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- ¹² Forrester, T. D. and H. U. Wittmer. 2013. A review of the population dynamics of mule deer and black-tailed deer *Odocoileus hemionus* in North America. *Mammal Review* 43:292-308
- ¹³ NYS Department of Environmental Conservation. (June 1991). *The Status and Impact of Eastern Coyotes in Northern New York*, http://www.dec.ny.gov/docs/wildlife_pdf/coystatnny91.pdf.
- ¹⁴ For an in depth discussion, see: Wendy Keefover, "Northern Rocky Mountain Wolves: A Public Policy Process Failure: How Two Special Interest Groups Hijacked Wolf Conservation in America," *WildEarth Guardians* www.wildearthguardians.org/site/DocServer/Wolf_Report_20120503.pdf 1, no. 1 (2012).
- ¹⁵ A. M. Kitchen, E. M. Gese, and E. R. Schauster, "Resource Partitioning between Coyotes and Swift Foxes: Space, Time, and Diet," *Canadian Journal of Zoology-Revue Canadienne De Zoologie* 77, no. 10 (1999).
- ¹⁶ Frye, Bob. (July 25, 2016). Habitat, not predators, seen as key to wildlife populations, Trib Live, <http://triblive.com/sports/outdoors/10756490-74/game-predator-predators>.
- ¹⁷ NYS Department of Environmental Conservation. (June 1991). *The Status and Impact of Eastern Coyotes in Northern New York*, http://www.dec.ny.gov/docs/wildlife_pdf/coystatnny91.pdf.