



To: House Agriculture, Chesapeake and Natural Resources Committee
Subject: SUPPORT for HB 1247 to prohibit wildlife killing contests in Virginia
Date: February 1, 2022

Dear Chair Ware and Committee members,

My name is Stephanie Boyles Griffin and I serve as the senior scientist in the Wildlife Protection department at the Humane Society of the United States. I also serve as a Commissioner on the Maryland Wildlife Advisory Commission. Although I currently live in Maryland, I grew up in Virginia and received my M.S. from Christopher Newport University, where I completed my masters project working with the Virginia Department of Transportation (VDOT) to resolve conflicts with wildlife along roadways in the Commonwealth. **I support HB 1247 to prohibit coyote and furbearer wildlife killing contests because these events are an affront to science-based wildlife management principles; they do not prevent conflicts with livestock, do not increase game species like deer, and do not reduce coyote populations.**

All wildlife species play integral roles in healthy ecosystems, and indiscriminately killing them harms our environment and our communities. Here in the eastern U.S., coyotes and foxes are filling the roles of top carnivores after the originals, wolves, and cougars, were eradicated. They provide a number of free, natural ecological services, and help to control disease transmission by keeping rodent populations in check, curtailing tick-borne diseases like Lyme.¹ In addition, coyotes consume carrion, and remove sick animals from the gene pool. And coyotes have trophic cascade effects such as indirectly protecting ground-nesting birds from smaller carnivores and increasing the biological diversity of plant and wildlife communities.²

Scientific studies have shown that some wildlife populations, including coyotes, that are depleted by unnatural means, such as in wildlife killing contests, simply reproduce more quickly due to the sudden drop in competition for resources.³ This is important, because organizers of killing contests will assert, without evidence, that they are helping livestock farmers by killing coyotes. But proactive lethal control of coyotes is a temporary fix that ultimately leads to an increase in the population. The evidence is clear: More than 100 years of coyote killing has not reduced their populations. In fact, since 1850 when mass killings of coyotes began, the range of this species has tripled in the United States.⁴

Indiscriminate killing of coyotes stimulates increases in their populations because it disrupts their social structure, thereby encouraging more breeding and migration, which ultimately results in more coyotes.⁵ Unexploited coyote populations are self-regulating based on the availability of food and habitat and territorial defense by resident family groups. Typically, only the dominant pair in a pack of coyotes reproduces, which behaviorally suppresses reproduction among subordinate members of the group. But when one or both members of the alpha pair are killed, other pairs will form and reproduce, lone

¹ Fox, C.H. and C.M. Papouchis. 2005. Coyotes in Our Midst: Coexisting with an Adaptable and Resilient Carnivore. Animal Protection Institute, Sacramento, California.

² 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).

³ 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).

⁴ 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)

⁵ Id.; see also S.D. Gehrt. 2004. Chicago Coyotes part II. *Wildlife Control Technologies* 11(4):20-21, 38-9, 42.

coyotes will move in to find mates, coyotes will breed at younger ages, litters are larger, and pup survival has been documented to be higher. These factors work synergistically to increase coyote populations following exploitation events, such as killing contests.⁶

In 2018, the North Carolina Wildlife Resources Commission published its Coyote Management Plan. Developed using a large body of scientific and peer-reviewed literature, the plan concluded that indiscriminate, lethal methods of controlling coyotes—including bounty programs, which are similar to wildlife killing contests—are ineffective and counterproductive, that coyotes provide benefits to humans and ecosystems (even outside of their historic range), and that non-lethal measures are the best way to address conflicts with coyotes.⁷ The North Carolina Commission stated that, “numerous bounty program case studies have led to conclusions that bounties are ineffective in achieving real declines of predators (including coyotes), at addressing livestock depredation, or at positively affecting populations of species targeted for protection.”⁸ It further noted that killing predators in bounty programs may have undesirable effects, such as increasing prey species viewed as pests and killing non-offending coyotes, which creates a niche vacancy for coyotes that have learned to prey on livestock.⁹ The North Carolina Commission reached the following conclusions:

- Intensive removal of coyotes is time-consuming and expensive, and research has yet to show it to be effective.¹⁰
- Coyotes rapidly increase their populations when large numbers of coyotes are removed from an area.¹¹
- A review of 34 studies that undertook intensive coyote removal found no reduction of coyote numbers over the long term.¹²
- Intensive hunting and trapping efforts aimed at lowering coyote numbers either maintained or increased coyote populations.¹³
- A coyote population can rebound in less than five years even when 90 percent of the population is eliminated from an area.¹⁴

New coyotes will quickly replace vacant territorial niches where coyotes have been removed. Coyote pairs hold territories, which leaves single coyotes (“floaters”) continually looking for new places to call home.¹⁵

Wildlife killing contests do not prevent conflicts with livestock. In fact, disrupting the family structure of coyotes may increase conflicts.¹⁶ For example, exploited coyote populations tend to have younger, less experienced coyotes who have not been taught appropriate hunting behaviors. These coyotes are more likely to prey on easy targets like livestock or pets. Additionally, exploited coyote packs are more likely to have increased numbers of yearlings reproducing and higher pup survival—and feeding pups is a significant motivation for coyotes to switch from killing their preferred, small, and medium-sized prey like rodents, to seeking out livestock.¹⁷ Killing contests do not target specific, problem-causing coyotes or foxes. Instead, they kill these species in woodlands and grasslands where conflicts with humans,

⁶ F.F. Knowlton. 1972. Preliminary interpretations of coyote population mechanics with some management implications. *J. Wildlife Management*. 36:369-382.

⁷ Coyote Management Plan. (Mar. 1, 2018). North Carolina Wildlife Resources Commission: 11, 21-28, at: https://www.ncwildlife.org/Portals/0/Learning/documents/Species/Coyote%20Management%20Plan_FINAL_030118.pdf.

⁸ *Id.* at 11-17.

⁹ *Id.*

¹⁰ *Id.* at 20.

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*

¹⁵ Gehrt, S.D. 2004. Chicago coyotes part II. *Wildlife Control Technologies* 11(4):20-21, 38-9, 42.

¹⁶ Draheim, M. “Why killing coyotes doesn’t make livestock safer.” *The Conversation*, May 29, 2017. <https://theconversation.com/why-killing-coyotes-doesnt-make-livestock-safer-75684>

¹⁷ 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).

livestock, and pets are minimal. They do not target the carnivore species who have become habituated by human-provided attractants such as unsecured garbage, pet food, or livestock carcasses.

Furthermore, common arguments regarding the impact of predator-livestock conflict are exaggerated. According to U.S. Department of Agriculture (“USDA”) data, livestock losses to wild carnivores are minuscule. The predominant sources of mortality to livestock, by far, are non-predator causes including disease, illness, birthing problems, and weather.¹⁸ The North Carolina Commission has noted that, based on USDA data, dogs are an equal or greater risk to sheep, goats, and cattle as compared to coyotes.¹⁹ Prevention—not lethal control—is the best method for minimizing conflicts with coyotes.²⁰ Eliminating access to easy food sources, such as bird seed and garbage, supervising dogs 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 than lethal control in addressing coyote-human conflicts.²¹

However, this legislation would not affect the ability of landowners and livestock ranchers to lethally remove predating animals from their property or obtain a licensed trapper to control coyotes or contract with the USDA for a licensed wildlife damage control operator. This bill would ONLY prohibit cruel, unsporting, and pointless contests to kill the most, the heaviest, or even the smallest animals for nothing more than a cash prize. Such contests serve no conceivable wildlife management objective, and are not based on any sound, scientific principles. Virginia must do better by its wildlife.

As a wildlife biologist who was raised and educated in the Great Commonwealth of Virginia, I care deeply about the state’s wildlife and understand the importance of managing wildlife according to the best available science. For these reasons, I ask you to pass HB 1247. Thank you.



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¹⁸ 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).

¹⁹ Coyote Management Plan. (Mar. 1, 2018). North Carolina Wildlife Resources Commission: 10.

²⁰ Fox, C.H. and C.M. Papouchis, Coyotes in Our Midst.

²¹ 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 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).