



**THE HUMANE SOCIETY
OF THE UNITED STATES**

July 2, 2020

The Missouri Conservation Commission
2901 W. Truman Blvd.
Jefferson City, MO 65109

Re: Proposed amendment to 3 CSR 10- 7.410, Hunting Methods

Members of the Missouri Conservation Commission:

On behalf of our Missouri members and supporters, the Humane Society of the United States opposes the proposed amendment to 3 CSR 10- 7.410, Hunting Methods, that would allow landowners and their authorized representatives to possess, control, and use night vision, infrared, and thermal imagery equipment to kill feral hogs on the landowner's property without prior approval from a conservation agent, and allow licensed hunters to use artificial light, night vision, infrared, and thermal imagery equipment to take coyotes from February 1 through March 31. This amendment would allow the use of unsporting methods for the purpose of offering more hunting opportunities, and has the potential to endanger the safety of people, pets, livestock, and wildlife in Missouri.

While the HSUS does not take a position on subsistence hunting, we do oppose the use of certain methods, including artificial light, night vision, infrared, and thermal imagery devices, that many hunters agree violate the principles of fair chase, sportsmanship, and respect for the hunted. There is simply no justification for allowing the use of these methods that give hunters an unfair advantage to kill coyotes during the time when they are pregnant, giving birth, and raising their pups. Missouri coyote hunters already have ample opportunities to pursue this species throughout the year using the existing legal methods, and livestock and land owners may already use these methods to remove depredating coyotes or feral hogs on their property at any time with written authorization from a conservation agent.

The random and indiscriminate use of these devices and methods constitutes a significant threat to the safety of Missouri's people, pets, livestock, and non-target wildlife. In May of 2020, the Tennessee Fish & Wildlife Commission rejected a similar proposal to allow the use of night vision and thermal devices when hunting coyotes, which was also advanced in the interest of creating new hunting opportunities. During a hearing on the proposal, several commission members expressed concerns about the safety of the practice, and pointed out that shooting coyotes at night is already allowed in that state by the law authorizing a landowner to kill any wildlife causing harm to land or livestock with no restrictions.¹ The Tennessee Wildlife Resources Agency (TWRA) reminded commissioners that it also opposes night hunting for coyotes because of safety concerns, with the agency's Law Enforcement Chief citing six accidental shooting incidents involving night time coyote hunters over the last ten years in several states.²

In some examples of this, just a few months ago a man who was walking on public property at night near Lansing, Michigan was shot in the chest by a teenager who was hunting coyotes using a night vision device.³ In 2017 a South Carolina man was shot in the face and killed by a woman using a night vision

¹ Richard Simms: "Tenn. wildlife commission votes down nighttime coyote hunting." June 1, 2020 at <https://newschannel9.com/sports/outdoors/tenn-wildlife-commission-votes-down-nighttime-coyote-hunting>.

² Richard Simms: "Tenn. wildlife commission considers night hunting of coyotes." News Channel 9, April 27, 2020 at <https://newschannel9.com/sports/outdoors/tenn-wildlife-commission-considers-night-hunting-for-coyotes>.

³ Kara Berg: "Police: Coyote hunter shoots 21-year-old after mistaking him for animal." *The Lansing State Journal*, April 27, 2020 at <https://www.lansingstatejournal.com/story/news/2020/04/27/mason-coyote-hunter-shoots-man-chest-while-hunting-williamston/3031884001/>.

scope to pursue wild hogs on private hunting land.⁴ And in 2010 the Georgia Department of Natural Resources reported that a man hunting coyotes using a high-powered rifle with night vision fatally shot a USDA Forest Service officer.⁵

Allowing the use of artificial light, night vision, infrared, and thermal imagery devices to hunt coyotes in early spring will not reduce their populations. The numbers are clear: since 1850 when mass killings of coyotes began, the range of coyotes has tripled in the United States.⁶ The University of Illinois Extension report *Living with Wildlife in Illinois: Coyote* points out, "...coyote population reduction (removing some or all of the coyotes in an area) is usually unrealistic and always temporary."⁷ That is because culling coyotes reaps only short-term population reductions, but stimulates pup recruitment and immigration. Persecution of coyotes disrupts their social structure, which, ironically, encourages more breeding and migration, and ultimately results in more coyotes.⁸

The Florida Fish and Wildlife Commission points out, "[r]emoving coyotes for the purpose of eradication is an inefficient and ineffective method to control populations . . . hunting and trapping place pressure on coyote populations, and the species responds by reproducing at a younger age and producing more pups per litter."⁹

After analyzing the results of indiscriminate killing of predators from bounty systems in the United States, including Missouri's own coyote bounties in the 1850s and 1930s-1940s, Bill White of the Missouri Department of Conservation found that mass killing of predators did not reduce the overall coyote population, improve game species production, or protect livestock.¹⁰ He noted that killing predators can be counterproductive, stating:

Populations fluctuate; predators eat their prey. Under heavy pressure, furbearers will move or mate at an earlier age and have larger litters. Reduce the population of one predator and others may spike. For example, remove foxes from an area and you may see an increase in smaller rodents that eat quail eggs. Remove coyotes and you could see an increase in foxes, skunks, possums and raccoons. It's much easier to point the finger at the big, bad coyote, evil bobcat, rugged red-tailed hawk or rascally raccoon than look at habitat conditions that affect the nesting success of quail, turkey and other early successional wildlife.

Mr. White instead recommended improving habitat for game species and targeting individual coyotes that are causing problems for livestock.¹¹

⁴ Janice Limon: "Shot that killed hog hunter recorded by woman's firearm, investigators say." WYFF 4, September 14, 2017 at <https://www.wyff4.com/article/shot-that-killed-hog-hunter-recorded-by-womans-firearm-investigators-say/12239667#>.

⁵ Tim Chittwood: "Georgia authorities say coyote hunter with night vision, high-powered rifle killed federal officer." *The Macon Telegraph*, March 7, 2010 at <https://www.macon.com/news/article28581217.html>.

⁶ 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)

⁷ 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.

⁸ 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).

⁹ Florida Fish and Wildlife Conservation Commission, *Coyotes: Living with Coyotes*. Available at <https://myfwc.com/conservation/you-serve/wildlife/coyotes/>.

¹⁰ Bill White, "The Bounty Hunter," *More Quail*, Missouri Department of Conservation, August 21, 2012, <https://mdc.mo.gov/blogs/more-quail/bounty-hunter>.

¹¹ Ibid.

The use of artificial light, night vision, infrared, and thermal imagery devices to kill coyotes in the early spring will not result in an increase in deer or other game species. The best available science demonstrates that killing native carnivores with the goal of increasing ungulate populations, such as deer, is unlikely to produce positive results. The key to ungulate survival is protecting breeding females and ensuring herds have access to adequate nutrition.¹² Comprehensive studies, including those conducted in Colorado¹³ and Idaho,¹⁴ 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.¹⁵

In response to concerns by hunters about the effect of carnivore species on game populations, the Pennsylvania Game Commission said in 2016, “After decades of using predator control (such as paying bounties) with no effect, and the emergence of wildlife management as a science, the agency finally accepted the reality that predator control does not work.” The Commission added, “[Predators] don’t compete with our hunters for game. The limiting factor is habitat—we must focus our efforts on habitat.”¹⁶

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.”¹⁷ That agency 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.¹⁸ And researchers recently evaluated deer harvest numbers in South Carolina, North Carolina, Ohio, Florida, New Jersey, and New York, and found that coyotes are not limiting deer numbers in those states.¹⁹

Hunting groups agree. The Izaak Walton League of America says in its position statements, “The League recognizes the intrinsic value of predatory species and their important ecological roles. ... There is no justification for widespread destruction of animals classified as predators ... The League opposes payment of bounties on predators or varmints.”²⁰ Ducks Unlimited adds, “Predator control cannot result in meaningful increases in duck numbers or birds in the bag and threatens to undermine the broad coalition of public support on which modern waterfowl conservation depends.”²¹ From the Mississippi

¹² 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.

¹³ 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.

¹⁴ 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.

¹⁵ 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

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.nysenvirothon.com/Referencesandother/coyotes.pdf>.

¹⁸ NYS Department of Environmental Conservation. (June 1991). *The Status and Impact of Eastern Coyotes in Northern New York*, <http://www.nysenvirothon.com/Referencesandother/coyotes.pdf>.

¹⁹ Bragina, E.V., Kays, R., Hody, A., Moorman, C.E., Deperno, C.S., Mills, L.S. “Effects on white-tailed deer following eastern coyote colonization.” *The Journal of Wildlife Management*, March 20, 2019.

²⁰ The Izaak Walton League of America: “Conservation Policies 2019,” pg. 54 <https://www.iwla.org/docs/default-source/about-iwla/2019-policy-book.pdf?sfvrsn=44>

²¹ Chuck Petrie: “Prairies Under Siege: Ducks, Habitat Conservation & Predators,” in the November/December 2003 *Ducks Unlimited* magazine. <https://www.ducks.org/conservation/where-ducks-unlimited-works/prairie-pothole-region/prairies-under-siege-ducks-habitat-conservation-predators>.

Flyway Council, "The Mississippi Flyway Council (MFC) does not support the practice of predator removal as a viable management practice to improve waterfowl recruitment over the long term or over large geographic areas. The MFC believes that the highest conservation priorities for improving waterfowl recruitment are the landscape-level wetland and grassland habitat restoration strategies advocated by the North American Waterfowl Management Plan (NAWMP)."²² And the National Wild Turkey Federation reminded hunters in a recent article, "Removing a random predator from the landscape has no impact whatsoever on widespread turkey populations...Without good nesting habitat, eggs and poults are simply more vulnerable. Turkeys evolved to cope with predators. As long as they have a place to hide their nests and raise their young, they'll do just fine without predator control."²³

The indiscriminate killing of coyotes with the use of artificial light, night vision, infrared, and thermal imagery devices in the early spring will also not reduce conflicts with humans, pets, or livestock—and may increase them. According to the Missouri Department of Conservation, "Coyotes are often unjustly blamed for livestock losses caused by free-running dogs."²⁴ Furthermore, exploited coyote populations tend to have younger, less experienced coyotes, increased numbers of yearlings who are reproducing, and larger litters. Feeding pups is a significant motivation for coyotes to switch from killing small and medium-sized prey to killing sheep.²⁵ The random and indiscriminate killing of coyotes does not target specific, problem-causing animals. Instead, it targets coyotes in woodlands and grasslands who are keeping to themselves—not those who have become habituated to human food sources such as unsecured garbage, pet food, or livestock carcasses (left by humans). The West Virginia Department of Natural Resources adds, "Predator control of coyotes preying on livestock should be restricted to targeted animals."²⁶ Ultimately, prevention, not lethal control, is the best method for minimizing conflicts with coyotes.²⁷

The indiscriminate removal of coyotes harms sensitive ecosystems. As the Missouri Department of Conservation has aptly recognized, "Coyotes feed on smaller animals and thus keep their populations in check; they also kill old, injured, sick animals unfit to survive. As scavengers, they eat carrion and therefore help clean the woods and fields."²⁸ Coyotes also provide a number of other free, natural ecological services including helping to control disease transmission, increasing biodiversity, and protecting crops. They 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.²⁹

Finally, the use of artificial light, night vision, infrared, and thermal imagery devices may increase the risk of poaching. Nocturnal poaching is practiced because darkness reduces the prey's flight

²² Ibid.

²³ The National Wild Turkey Federation: "Coexist with Predators" <http://www.nwtf.org/conservation/article/coexist-predators>

²⁴ "Coyote," Missouri Department of Conservation, <https://nature.mdc.mo.gov/discover-nature/field-guide/coyote>.

²⁵ 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).

²⁶ West Virginia Department of Natural Resources at <http://wvdnr.gov/hunting/CoyoteResearch.shtml>

²⁷ Gehrt, S.D., Anchor, C., and White, L.A.: "Home Range and Landscape Use of Coyotes in a Metropolitan Landscape: Conflict or Coexistence?" *Journal of Mammalogy* 90(5):1045-1057. 2009, and Poessel, S.A., Breck, S.W., Gese, E.M.: "Spatial ecology of coyotes in the Denver metropolitan area: influence of the urban matrix," *Journal of Mammalogy* 97 (5): 1414-1427, 2016.

²⁸ The Missouri Department of Conservation: "Coyote" at <https://nature.mdc.mo.gov/discover-nature/field-guide/coyote>

²⁹ 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).

distance, artificial light “blinds” or freezes animal movement, and the illegal activity is less likely to be observed in nighttime hours.

For the reasons stated above, the Humane Society of the United States and our Missouri volunteers and supporters ask that you reject the proposed amendment to 3 CSR 10- 7.410, Hunting Methods. Thank you for your time and consideration of this important public safety and wildlife protection issue.

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