

Wildlife Killing Contests: Contrary to 21st Century, Science-Based Wildlife Management

In wildlife killing contests, participants vie for cash and prizes for killing a variety of species including coyotes, bobcats, foxes, squirrels, and even crows and other birds. Judging criteria may be based on the largest, smallest, or heaviest animals killed, or on a system of points assigned to each species. Raffle tickets may be sold for drawings to win rifles and other hunting equipment, and non-participants may even be able to bet on the outcome of the contest. Following the weighing or measuring of the animals and the awarding of the prizes, participants may celebrate with a banquet or party at a local bar or restaurant.



Americans have already determined, with strong laws and penalties in all 50 states, that blood sports like animal fighting will no longer be tolerated by modern society. Wildlife killing contests face this same national public condemnation because the ethics of sportsmanship, fair chase, and respect for wildlife are flouted by their participants.

State wildlife agencies hold and manage wildlife in the public's trust, and those that allow wildlife killing contests risk besmirching all hunting, even ethical hunters. Vermont's Fish & Wildlife department has noted, "Coyote hunting contests are not only ineffective at controlling coyote populations, but these kinds of competitive coyote hunts are raising concerns on the part of the public and could possibly jeopardize the future of hunting and affect access to private lands for all hunters."

At a time when hunting numbers are declining and hunter recruitment and education are a priority focus for most state agencies, wildlife management agencies must recognize that these types of cruel, wasteful, and ineffective killing contests must become a thing of the past.²

Ineffective and damaging to the reputation of sportsmen and sportswomen.

Randomly killing coyotes, such as in wildlife killing contests, does not reduce their populations. In fact, since 1850 when mass killings of coyotes began, the range of coyotes has tripled in the United States.³ 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."⁴

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Vermont Fish & Wildlife

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.⁵

The alpha pair, often the parents of different aged offspring, are the pack's only reproducers. When one or both members of the alpha pair are killed, the survivor will find a new mate, and the remaining members of the pack, who had been behaviorally sterile, will now also mate,

increasing the number of breeding pairs. At the same time, lone coyotes will move in to mate, young coyotes will start having offspring sooner, and litter sizes will grow.⁶

With some carnivores such as coyotes, lethal predator controls are ineffective over the long term. Biologist Bradley Bergstrom of Georgia's Valdosta State University writes:

There are 3 reasons that predator removal is likely to have no long-term effect—or even adverse effects—on depredation of livestock: vacant territories are quickly recolonized (Knowlton et al. 1999; Treves and Naughton-Treves 2005); immigration rate of breeding pairs into the area experiencing lethal control can increase (Sacks et al. 1999); and immigrants are more likely to be subadults, which have a greater propensity for livestock depredation than older adults (Peebles et al. 2013).⁷

While widespread killing may temporarily reduce coyote numbers, coyotes bounce back quickly. Therefore, it makes more sense for livestock growers and urban municipalities to focus on non-lethal strategies. Non-lethal controls are often cheaper, more socially acceptable, and result in longer-term prevention of livestock losses because the social order of native carnivores is not disrupted leading to social strife and exploitation of easy prey. Predator control is only acceptable to the public if it removes

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New York State Department of Environmental Conservation

the individuals who prey on livestock, damage crops or cause economic losses, but is less acceptable for use in protecting other wildlife (e.g., ungulates or protected species).¹⁰

It's almost impossible to completely eradicate coyotes from an area.¹¹ New coyotes will quickly replace coyotes that were removed. Coyote pairs hold territories, which leaves single coyotes ("floaters") continually looking for new places to call home.¹²

In a recent report, the Vermont Fish & Wildlife department said about wildlife killing contests, "...we do not believe such short-term hunts will have any measurable impact on regulating coyote populations, nor will they bolster populations of deer or other game species." ¹³

Indiscriminate killing of coyotes will not increase ungulate populations.

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 because the key to ungulate survival is protecting breeding females and ensuring herds have access to adequate nutrition, not preventing predation.¹⁴

Comprehensive studies, including those conducted in Colorado¹⁵ and Idaho,¹⁶ 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.¹⁷

In response to hunters' concerns that coyotes are diminishing populations of game animals, the Pennsylvania Game Commission made the following statements in 2016:¹⁸

 "During the late 1800s and early 1900s, the Game Commission focused much of its energy and resources into predator control efforts. During this period, we did not understand the relationship between predators and prey. 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."
- "[Predators] don't compete with our hunters for game. The limiting factor is habitat—we must focus our efforts on habitat."
- The Commission called it a "false prophecy" to "pretend that predator control can return small game hunting to the state[.]" It also stated that the focus must be based on "...science, not anecdotal comments stemming from theory or supposition."



A U.S. Department of the Interior biologist has pointed out, "Since 1947 at least, we know that paying out bounties encourages fraudulent behaviors by participants." And 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."²⁰ 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.²¹

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.²²

"[Predators] don't compete with our hunters for game. The limiting factor is habitat—we must focus our efforts on habitat." The Pennsylvania Game Commission

Indiscriminate killing of coyotes will not reduce conflicts—and may increase them.

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.²³

Open hunts and killing contests do not target specific, problem-causing coyotes. Instead, they target 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). Prevention—not lethal control—is the best method for

minimizing conflicts with coyotes.²⁴ Eliminating access to easy food sources, such as pet food 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 birthing cattle and sheep in barns or sheds and employing electric fences, guard animals, and removing dead livestock) are more effective.²⁵



Removal of coyotes harms sensitive ecosystems.

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 (curtailing hantavirus, a rodent-borne illness that kills humans), 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.²⁶

While there is dispute in some states as to whether coyotes are native, in regions such as the eastern United States this species established itself as top predator following the eradication of apex native carnivores like wolves and mountain lions.

Many non-lethal protection methods have proven effective:

- Protect principal prey herds (e.g., elk and deer) by preventing poaching and limiting legal overkill of wild herds.²⁷
- Keep livestock, especially maternity pastures, away from areas where wild cats have access to ambush cover.²⁸
- Keep livestock, especially the most vulnerable—young animals, mothers during birthing seasons and hobby-farm animals—behind barriers such as electric fencing and/or in barns or pens or kennels with a top.²⁹ The type of enclosure needs to be specific for the predator to prevent climbing, digging or jumping.³⁰
- Move calves from pastures with chronic predation problems and replace them with older, less vulnerable animals.³¹
- Concentrate calving season (i.e., via artificial insemination) to synchronize births with wild ungulate birth periods.³²
- In large landscapes, use human herders and/or guard animals (i.e., especially a variety of dogs).³³
- Guard dogs work better when sheep and lambs are contained in a fenced enclosure rather than on open range lands where they can wander unrestrained.³⁴
- "Range riders," people who are employed to monitor cattle and sheep, monitor wolves or facilitate livestock herding (keeping cattle bunched together); their goal is to reduce livestock losses by wolves. Tange riders can more rapidly detect sick or injured cattle, who would otherwise be vulnerable to wolves or to rapidly detect and remove dead cattle, reducing habituation and potential future losses. Here
- Change livestock type. In a study in Norway, a heavy-bodied sheep species, *Dala sheep*, were more vulnerable to wolverine attacks than lighter-bodied sheep species, *Norwegien furbearing sheep* and *Rygia* sheep.³⁷
- Use a variety of auditory and visual deterrents, such as fladry (strips of plastic tied to a nylon rope and suspended above ground with stakes); turbo fladry (electrified using solar equipment); suspended clothing; LED flashing lights (sold as "Foxlights"); radio alarm boxes set off to make alarm sounds/noises when radio-collared wolves come in proximity of livestock; low-cost sound/visual equipment deters wild cats; spotlights; and air horns.³⁸

Statements from wildlife management professionals and hunting groups on wildlife killing contest and predator control:

- Mike Finley, chair of the Oregon Fish and Wildlife Commission: "Killing large numbers
 of predators as part of an organized contest or competition is inconsistent with sound,
 science-based wildlife management and antithetical to the concepts of sportsmanship
 and fair chase."
- Michael Sutton, former president of the California Fish and Game Commission:
 "Awarding prizes for wildlife killing contests is both unethical and inconsistent with our
 current understanding of natural systems. Such contests are an anachronism and have
 no place in modern wildlife management."⁴⁰
- Ray Powell, former New Mexico Commissioner of State Lands: "The non-specific, indiscriminate killing methods used in this commercial and unrestricted coyote killing contest are not about hunting or sound land management. These contests are about personal profit, animal cruelty. ... It is time to outlaw this highly destructive activity."
- Ted Chu, former wildlife manager with Idaho Fish and Game: "Hunting is not a contest and it should never be a competitive activity about who can kill the most or the biggest animals." ¹⁴²
- Jim Posewitz, retired biologist with Montana Department of Fish, Wildlife & Parks, and author of Beyond Fair Chase and Inherit the Hunt: A Journey into American Hunting: "Competitive killing seems to lack the appreciation of and the respect for wildlife fundamental to any current definition of an ethical hunter."
- Eric Nuse, former executive director of the International Hunter Education
 Association: "We don't like anything that smacks of commercialization with money or
 prizes. Anything that doesn't honor the animals grates on us and seems inherently
 wrong. These contests create very poor PR for hunters."
- The Nevada Board of Wildlife Commissioners: "[T]he wildlife management profession does not generally recognize the use of contests as a tool with substantial wildlife management effect."45
- New Mexico Land Commissioner Stephanie Garcia Richard: "These are not hunting contests. They are animal cruelty contests. It is an inexcusable practice, and today I used my authority to ban organized killing contests of unprotected species on any of the nine million acres of State Trust Land that I am charged with overseeing."
- Vermont Fish & Wildlife: "Coyote hunting contests are not only ineffective at controlling coyote populations, but these kinds of competitive coyote hunts are raising concerns on the part of the public and could possibly jeopardize the future of hunting and affect access to private lands for all hunters."

- The Arizona Game and Fish Commission: "Extensive public controversy exists about predator/fur-bearing contests that award prizes to participants who kill the largest number or variety of predator/fur-bearing animals or the contest is based on the combined weight of animals a participant kills. To the extent these contests reflect on the overall hunting community, public outrage with these events has the potential to threaten hunting as a legitimate wildlife management function." 48
- The Massachusetts Division of Fisheries & Wildlife (MassWildlife): "Further, recognizing that public controversy over this issue has the potential to threaten predator hunting and undermine public support for hunting in general, MassWildlife recommended the following regulatory changes:
 - o Prohibit hunting contests for predators and furbearers.
 - Prohibit "wanton waste" of all wildlife taken during regulated hunting and trapping seasons.
 - Change harvest reporting requirements for fox and coyote to be reported within 48 hours, consistent with current reporting requirements for deer, turkey, and bear."
- The Pennsylvania Game Commission: "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." 50
- The West Virginia Department of Natural Resources: "Predator control of coyotes because of wildlife predation is unwarranted and unnecessary. Predator control of coyotes preying on livestock should be restricted to targeted animals." 51
- The New York State Department of Environmental Conservation has pointed out that the random removal of coyotes "...will not: (a) control or reduce coyote populations; (b) reduce or eliminate predation on livestock; or (c) result in an increase in deer densities."52
- The Massachusetts Division of Fisheries and Wildlife (MassWildlife): "The contest is being offered by a private business, it has nothing to do with managing wildlife...! do want to make it clear, coyote contests are not a management tool by any stretch of the imagination."

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- The North Carolina Wildlife Resources Commission's new coyote management plan found that bounties and harvest incentive programs are prone to corruption, expensive, do not increase harvest, and do not target problem animals, and that ample evidence from case studies supports the conclusion that these methods are ineffective at reducing conflicts with coyotes or impacting coyote populations. It concludes, "While coyote population reduction ("coyote control") is often the first and only management approach that people suggest, it has proven ineffective."
- Charlie Killmaster, deer and feral hog biologist for the Georgia Department of Natural Resources: "A number of states have shown that government-sponsored programs to eradicate coyote populations are huge money pits that result in failure." 55

- Dr. Scott Henke, researcher at Texas A&M University-Kingsville: "There's a belief that coyote control is necessary to help deer and quail populations. But it could actually do more harm than good."..." That same fawn taken by a coyote was likely to die from something else." 56
- In a 2014 deer harvest report, the South Carolina Department of Natural Resources concluded that trying to control coyotes to manage predation of deer was ineffective.⁵⁷
- In a new study, **North Carolina researchers** 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, and that coyote removal programs will do little to increase regional deer numbers.⁵⁸
- The Wildlife Society: "6. Recognize that there is little evidence to support the use of killing contests for controlling predator populations. 7. Recognize that while species killed in contests can be legally killed in most states, making a contest of it may undermine the public's view of ethical hunting." 59
- The Izaak Walton League of America: "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."
- **Ducks Unlimited:** "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." 61
- The Mississippi 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)."62
- The National Wild Turkey Federation: "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."

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Fig. 1. USFWS: Wildlife Recreation Participation & Expenditures: 2011 vs. 2016 data			
	2011	2016	Percent Change
Wildlife Watcher Numbers	71.8M	86.0M	20
Wildlife Watcher Expenditures	\$59.1B	\$75.9B	28
All Hunter Numbers	13.7M	11.5M	-16
Big Game Hunter Numbers	11.6M	9.2M	-21
Hunter Expenditures	\$36.3B	\$25.6B	-29
Hunters	2011	2016	Change
Big Game	11.6M	9.2M	-2.4M
Small Game	4.5M	3.5M	-1M
Migratory Birds	2.6M	2.4M	-0.2M
Other animals	2.2M	1.3M	-0.9M

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