



Why Killing Does Not Solve Conflicts With Coyotes

As coyotes have expanded their range across North America, encounters with people have increased. These sometimes trigger alarm in people who fear for the safety of their pets and children. To allay this, communities may feel they need to pay for wide scale programs to remove coyotes from the population. These killing programs don't work and are inhumane. Better solutions exist.

Why Don't Coyote Killing Programs Work?

They are ineffective

- It is extremely difficult to ensure that the problem-causing coyote(s) will be the one(s) located and killed.
- Coyotes removed from an area will quickly be replaced by others. Coyotes pairs hold territories, which leaves single coyotes ("floaters") constantly looking for new places to call homeⁱ.
- If attractants in a neighborhood are not removed (e.g. pet food, garbage, etc) new coyotes in an area can quickly become "nuisance" coyotes.

They won't reduce coyote populations

- Research suggests that when aggressively controlled, coyotes can increase their reproductive rate by breeding at an earlier age, having larger litters, and a higher survival rate among youngⁱⁱ. This allows coyote populations to quickly bounce back, even when as much as 70% of their numbers are removed.ⁱⁱⁱ
- It is nearly impossible to completely eradicate coyotes from an area. Despite bounties and large-scale efforts to kill coyotes over the last 100 years, coyotes have in fact expanded their range throughout the U.S. and Canada tremendously. One study even found that killing 75% of a coyote population every year for 50 years would still not exterminate the population.^{iv}

Removal is costly

- Coyotes are very intelligent animals and are difficult to catch. Even a very skilled trapper or sharpshooter, at a hefty price tag, will need many hours to catch a targeted coyote.

Trapping is inhumane

- The most common devices used to capture coyotes are leghold traps and neck snares. Both can cause severe injuries, pain, and suffering^v.
- Pets become unintended victims of traps set for coyotes. An informal search of media reports suggests thousands of unintended incidents have occurred, causing heartbreak for the families affected.
- Non-target wildlife is also caught – and many sustain injuries so severe that they die or must be killed.

What Can Stop Pet Attacks? First, some claim that diseased coyotes are to blame for pet attack incidents, and that removing such animals from the population is the answer. This is not the case.

Most pet attacks are caused by healthy, habituated coyotes

- Except when rabid, diseased coyotes do not exhibit aggressive behavior more often than healthy coyotes.
- There is no evidence that coyotes with mange are more likely to attack people or pets. Mange-afflicted coyotes can simply appear threatening because they are weak, strange-looking (due to hair loss) and may be found resting in suburban areas during the daytime^{vi}.
- Attacks on dogs during the months of April-December are probably caused by coyotes that have lost their fear of people (become habituated). This occurs when coyotes are being fed in residential areas (either intentionally or unintentionally through pet food that's left outside, garbage, etc.) and are not harassed by people.
- A 10 year study of over 300 coyotes in the greater Chicago metropolitan area revealed only 2 coyotes that had attacked pets. Necropsies done on these coyotes showed that they had been eating pet food, but were otherwise healthy^{vii}.

Territorial attacks

- Coyotes breed between January and March. During this time, it is natural for them to protect their territories from other canids (including domestic dogs). Coyotes may attack dogs in yards or being taken for walks because they view them as a threat.

How to protect dogs:

- It is normal for coyotes to be afraid of people. The best protection for your dogs is to always accompany them outdoors and to use a leash when walking them in a park.
- If your dog is left unsupervised in your yard, installing a coyote-proof fence is another solution. A coyote-proof fence is at least 6 feet tall and extends at least 12 inches underground or includes a rolled-out apron of mesh (measuring at least 12 inches horizontally and secured with landscaping staples). It can also be equipped with a protective device like a Coyote Roller (www.coyoteroller.com). Coyote rollers are meant to literally "roll off" any coyotes who attempt to scramble over the fence, and will be equally effective in keeping dogs from jumping out of fenced yards.
- Since most dog attacks occurring during April – December are probably caused by habituated coyotes, it is critical to remove or secure attractants (such as pet food and garbage) from residential areas.

How to protect cats & other small pets (such as rabbits):

- It is natural for coyotes to hunt small mammals – usually "easy" prey such as rabbits and small rodents. However, if outside, our pets may also be at risk. Keeping your cat indoors is the best way to protect her from harm – not only



coyotes, but also cars, diseases, dogs, and even mean-spirited people.

- Pet food serves as an attractant for coyotes in residential areas. If you must feed pets outdoors do so only by day and remove uneaten food immediately.
- Elevated feeding places and escape opportunities (trees and/or a tall climbing pole) can help protect cats.

What Does Work? A program combining **Education** and **Hazing** offers the best method for handling and preventing conflicts with coyotes, and is working already in a number of communities^{viii}.

Education:

- Food Attractants:
 - Residents must be educated about feeding coyotes and how this is simply wrong, no matter how well-intentioned the feeder may be.
 - Indirect sources of food -- pet food, composted meat scraps and trash must be removed or properly secured.
- Pets:
 - Residents should be made aware of the importance of keeping cats indoors and not leaving dogs outside unattended.
 - Leash laws must be enforced in open spaces and natural areas.
- Educational campaigns:
 - Children must be instructed in how to recognize a coyote and what to do if they encounter one. Children should never run from a coyote; instead, they should stand up straight, wave their arms up in the air, and be as loud as possible while moving slowly toward the nearest adults.
 - Unfounded fears about coyotes need to be dispelled, and good information provided on coyote behavior.

Hazing:

- **What is hazing?**
 - When coyotes do not run away when approached or charged by a human, they have probably become habituated, or lost their fear of humans. They may even approach people, looking for food handouts.
 - **Hazing** is an activity or series of activities conducted to reinstall the natural fear of humans back into coyotes. It includes simple actions such as yelling and arm waving, water hose dousing, using noise makers like blow horns and whistles, and throwing objects such as sticks or toy balls.
 - Communities including Denver, Colorado; Vancouver, British Columbia; and Los Angeles, California have successfully used hazing to reverse undesirable behavior in their coyote populations.
- **Hazing techniques**
 - For many coyotes, making yourself *loud* (by yelling or using homemade noisemakers and *large* (by standing tall and waving your arms) is all that is needed to scare them away. (Follow this [link](#) for a demonstration)

- More aggressive methods (including banging pots and pans, throwing objects, squirting a hose, or using noisemakers like air horns) may be necessary for some coyotes. Groups of volunteers can even be recruited and taught to haze in problem areas.
- It is important to continue hazing until the coyote completely leaves the area. Employing a variety of hazing techniques is also helpful to prevent habituation.

The bottom line is that killing is not a solution for managing conflicts between people and coyotes. A combination of education and hazing can be more effective. By “educating” your resident coyotes you will be leaving territory holders in place who know and abide by the “rules” of living close to people. Coyotes are here to stay – it’s up to us to find ways of coexisting with them.

ⁱ Gehrt, S. D. 2004b. Chicago coyotes part II. *Wildl. Control. Technol.* 11(4):20-21, 38-9, 42.

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

ⁱⁱⁱ 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.

^{iv} Connolly, and W.M. Longhursts. 1975. The effects of control on coyote populations: a simulation model. *Univ. California, Div. Agric. Sci., Bull.*1872. 37pp.

^v Fox, C.H. and C.M. Papouchis (eds.). 2004. *Cull of the Wild: A Contemporary Analysis of Wildlife Trapping in the United States.* Animal Protection Institute, Sacramento, California.

^{vi} Gehrt, S.D. et al. 2009. Home range and landscape use of coyotes in a metropolitan landscape: conflict or coexistence? *Journal of Mammalogy* 90(5):1045-1057.

^{vii} Gehrt, S.D. 2004. Urban coyote ecology and management: The Cook County, Illinois, coyote project. *Ohio State University Extension Bulletin*, 929.

^{viii} Coyote Management Plan. Denver Parks & Recreation Natural Areas Program, Natural Resources Division. October 2009.