



SOLUTIONS FOR COYOTE CONFLICTS

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.



William Weaver Photography

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.

For more information and tips, see our website: www.humanesociety.org/animals/coyotes

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

ⁱⁱ Knowlton, F.F. 1978. 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. Longhurst. 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.



COYOTE HAZING GUIDELINES:

How to Haze for Effective Reshaping of Coyote Behavior



Generally, coyotes are reclusive animals who avoid human contact. Coyotes who've adapted to urban and suburban environments, however, may realize there are few real threats and approach people or feel safe visiting yards even when people are present. These coyotes have become habituated (lost their fear of humans), likely due to the ready availability of food in our neighborhoods. Sometimes, this food is deliberately provided by people who like to watch wild animals or misguidedly feel they are helping them by feeding. These bold coyotes should not be tolerated or enticed, but definitely given the message that they should not be so brazen.

Hazing is a method that makes use of deterrents to move an animal out of an area or discourage an undesirable behavior or activity. Hazing can help maintain a coyote's fear of humans and deter them from neighborhood spaces such as backyards and play spaces.

Methods of Hazing include:

Using a variety of different hazing tools is critical; coyotes can habituate to individual items, sounds, and actions.

- Yelling and waving your arms while approaching the coyote
- Noisemakers: Voice, whistles, air horns, bells, soda cans filled with pennies or dead batteries, pots and pans banged together
- Projectiles: sticks, small rocks, cans, tennis balls, rubber balls
- Other: hoses, water guns with vinegar water, spray bottles with vinegar water, pepper spray, bear repellent, walking sticks

“Go Away Coyote!”

- The simplest method of hazing a coyote involves being **loud** and **large**:
 - Stand tall, wave your arms and yell at the coyote, approaching it if necessary, until it runs away.
 - Follow this link for a demonstration:
http://www.youtube.com/watch?v=EDm9wjfcdbw&feature=player_embedded
- If a coyote has not been hazed before, he may not immediately run away when you yell at him. If this happens, you may need to walk towards the coyote and increase the intensity of your hazing.
- The coyote may run away, but then stop after a distance and look at you. It is important to continue to haze the coyote until he completely leaves the area. You may need to use different tactics, such as noisemakers, stomping your feet, or spraying the coyote with a hose, to get him to leave.

Dog-walking Tools

- There are several tools that you can carry with you while walking your dog that can be used to repel coyotes. (*Remember to always walk your dog on a leash.*) These include:
 - Homemade noisemakers (follow this link for “recipe”):
<http://www.stanleyparkecology.ca/programs/conservation/urbanWildlife/coyotes/deterrent.php>
 - Whistle or small air horn (you can purchase small air horn “necklaces”)
 - Squirtguns
 - Pepper spray
 - Pick up sticks or rocks and throw them towards the coyote

In Your Yard:

Remember, keeping pets and pet food inside is the best way to keep coyotes out of your yard. If you do encounter coyotes, all of the above methods can be used in your yard at home. First, try the “Go Away Coyote!” method (yell and wave your arms as you approach the coyote). Here are some additional methods you can also use:

- Squirt the coyote with your garden hose
- Bang pots and pans together

Remember:

- **NEVER run away from a coyote!**
- The coyote may not leave at first, but if you approach it closer and/or increase the intensity of your hazing, it will run away.
- If the coyote runs away a short distance and then stops and looks at you, continue hazing it until it completely leaves the area.
- After you have successfully hazed a coyote, he or she may return again. Continue to haze the coyote as you did before; it usually takes only one or two times to haze a coyote away for good.
- Coyotes are skittish by nature and as a rule do not act aggressively towards aggressive people. However, engaging animals that are sick or injured can result in unpredictable behavior. If you suspect that a coyote is sick or injured, contact the proper authorities and DO NOT interact with the coyote.



Tips for Success:

- The more often an individual coyote is hazed, by a variety of tools and techniques and a variety of people, the more effective hazing will be for changing behavior.
- The coyote being hazed must be able to recognize that the potential threat is coming from a person. (Hiding behind a bush and throwing rocks, for example, will not be effective.)
- Techniques and tools can be used in the same manner for one animal or multiple animals. Usually there is a dominant animal in the group who will respond, and others will follow her lead.
- Certain levels of hazing must always be maintained so that future generations of coyotes do not learn or return to unacceptable habits or behaviors.
- Educating the public about removing coyote attractants, proper pet care and safety, and coyote behavior are critical parts of a successful coyote plan.

For more information and tips, see our website: www.humanesociety.org/animals/coyotes



PREVENTING COYOTE CONFLICTS:

How to Keep Coyotes Out of Your Yard and Keep Your Pets Safe

Coyotes generally avoid humans, even when their home range encompasses largely urban or suburban habitat. However, the presence of a free buffet in the form of pet food, compost or trash can lure coyotes into yards and create the impression that these places are bountiful feeding areas. Without the lure of food or other attractants, their visits will be brief and rare. But a coyote who finds food in one yard may learn to search for food in others.

What attracts coyotes to urban and residential areas?

Food

Deliberately feeding coyotes is a mistake. You may enjoy hand-feeding animals, but this is a surefire way to get them accustomed to people and will ultimately lead to their demise. Here are some other general rules to follow:

- Avoid feeding pets outside. If you must, feed them only for a set time during the day (for no more than one hour) and remove the food bowl as soon as your pet has finished her meal.
- In dry conditions, water can be as alluring as food, so remove water bowls set outside for pets and make watering cans unavailable.
- If you compost, use enclosed bins and never compost meat or fish scraps.
- Good housekeeping, such as regularly raking areas around bird feeders, can also help discourage coyote activity near residences.
- Remove fallen fruit from the ground.
- Keep trash in high-quality containers with tight-fitting lids. Only place the cans curbside the morning of collection. If you leave them out overnight, they are more likely to be tipped and broken into.



Shelter

Coyotes are secretive animals, and studies have shown they can live for a long time in close proximity to dense human settlements without ever being noticed. Such coyotes are abiding by the rules we set for minimal conflicts, and should be left alone.

In the spring, when coyotes give birth and begin to raise litters, they concentrate their activities around dens or burrows in which the young are sheltered. At these times, they may become highly defensive and territorial, and challenge any other coyote or dog that comes close to the pups. People walking their dogs in parks and wooded areas may run into these situations and even be challenged by parent coyotes to back off. Fights occur rarely and most often when dogs are off leash. It's important to recognize such incidents for what they are: defense of space, not random attacks. If you encounter a coyote when walking your pet, do NOT run away; haze the coyote with the techniques described in our **Hazing Guidelines**.



Free-roaming pets

Free-roaming pets, especially cats and sometimes small dogs, may attract coyotes into certain neighborhoods. Although coyotes are primarily nocturnal, the best way to minimize risk to pets

is not to leave them out unattended at any time. Don't allow your cat to roam freely. Ideally, cats should be kept indoors regardless of whether there is a coyote in the area or not—to keep cats safe and healthy as well as to keep them from killing birds and other wildlife.

Feral cat colonies

People who feed feral cats are often concerned coyotes might prey on the cats. These concerns are well founded, as coyotes will be attracted to both the outdoor pet food and the cats themselves as prey. Here are some general suggestions for keeping such cats safer:

- Feed cats only during the day and at a set time— and pick up any leftovers immediately. Provide escape routes for cats. In treeless or open areas, erect "cat posts" (see below).
- Elevate feeding stations beyond coyotes'—but not the cats'—reach. The size of the station/s can be customized to the size of the colony you feed and the amount of food should be adjusted for the number of cats you feed. Avoid leftovers that attract other animals. Elevated feeding stations mean safer cats, no more messy, turned over bowls and great savings in cat food bills!
- In places where trees and other climbing opportunities are scarce, some people have reported success protecting barn and feral cats from coyotes by giving the cats escape routes in the form of "cat posts." These can be wooden posts (four inches by four inches or corner posts) that stand out of the ground at least ten to twelve feet and can be climbed by cats, but not by coyotes.
- Discourage/harass coyotes seen on the property. Go after them aggressively, using the techniques described in our **Hazing Guidelines**. Making them feel uncomfortable will encourage them to stay out of the area.



Michelle Riley/The HSUS

Risks to dogs



Dawn Macheca

Dogs (especially small dogs) are also vulnerable to coyote confrontations. These incidents generally involve coyotes who are either accustomed (habituated) to people (usually due to wildlife feeding), or coyotes who are protecting their territory and pups (usually during breeding season).

Dogs (especially small dogs) should not be left outside unattended and should always be kept on a leash in public areas. It is important to never let your dog interact or play with a coyote. Pet food and water should be kept indoors to avoid attracting coyotes to your yard.

Although "attacks" on larger dogs are rarer, coyotes will sometimes go after a large dog when they feel that their territory is threatened. This generally occurs during the coyote breeding season, which takes place from January through March. During this time, it is especially important not to leave dogs outside unattended and to keep them on leashes when in public areas.

To further protect cats and dogs, fencing can be used to keep coyotes out of residential yards. Fences must be at least 6 feet tall, extend underground at least 12 inches or include an L-shaped mesh apron extending outward at least 18 inches and secured with landscaping staples. Devices such as the "coyote roller" (www.coyoteroller.com) "roll off" coyotes that try to scramble over the fence and can enhance the effectiveness of a fence. Do-it-yourself options include adding PVC piping or chicken wire to the top of your fence to prevent coyotes from jumping over, and retrofitting a mesh apron to the bottom of the fence (extending 12+ inches out, secured with landscaping staples) to keep coyotes from digging under.

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