City of Atlantic Beach
Coyote Management and Education Plan

Developed in partnership with the Humane Society of the United States
and the Florida Fish and Wildlife Conservation Commission
About this plan

This Coyote Management and Education Plan, largely based on recommendations from the Humane Society of the United States, was adopted by the City of Atlantic Beach in 2019 to assist in humanely and effectively preventing and solving conflicts among coyotes, people and companion animals. The information in this plan has been gathered from scientific and peer-reviewed articles, from experts in the field of human-coyote conflict resolution, and from successful coyote management plans throughout the United States.

City of Atlantic Beach acknowledgements

The City of Atlantic Beach would like to express its gratitude to the Humane Society of the United States (HSUS) and Florida Fish & Wildlife Conservation Commission (FWC) for their guidance, expertise and spirit of cooperation in working on this project. We especially acknowledge the brilliant work of the FWC’s Catherine Kennedy and Sarah Helm, and the HSUS’ Lynsey White.

Humane Society of the United States acknowledgements

The HSUS acknowledges Paula-Marie Lewis, a PhD student at Griffith University, Australia, for her work in the creation of this management plan. Additionally, the following coyote management plans influenced many of the ideas and guidelines presented in this plan:

- City and County of Broomfield (Colorado) Coexistence with Wildlife Policy
- City of Calabasas (California) Coyote Management Plan
- City of Centennial (Colorado) Coyote Management Plan
- City of Davis (California) Coyote Management and Coexistence Plan
- City & County of Denver (Colorado) Coyote Management Plan
- Portland (Oregon)-Vancouver (British Columbia) Model Coyote Management Policy
- Village of Riverside (Illinois) Coyote Home Audit Checklist
- City of Wheaton (Illinois) Coyote Policy

For more information about solving conflicts with coyotes, email wildlife@hsus.org or visit humanesociety.org/coyotes. For more information from the Florida Fish and Wildlife Conservation Commission, visit myfwc.com.

Local resources

The City of Atlantic Beach has the following local resources available to its residents:

- Coyote education and training presentations
- Brochures and pamphlets
- Yard audits to help residents identify potential attractants and make their yards less attractive to coyotes
- Hazing training to train coyotes to stay away from people and areas they are not wanted
- A team of resident volunteers trained by the Fish & Wildlife Commission to assist residents in our community

For information on these resources, or for other inquiries on matters pertaining to the wildlife in our beautiful community, email wildlife@coab.us or call (904) 247-5859.

Photo Credit

Cover Photo: Charles Wood
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION &amp; GOALS</td>
<td>4</td>
</tr>
<tr>
<td>THE COYOTE</td>
<td>5</td>
</tr>
<tr>
<td>COYOTE ATTRACTANTS IN ATLANTIC BEACH</td>
<td>6</td>
</tr>
<tr>
<td>HUMAN-COYOTE CONFLICT DEFINITIONS</td>
<td>8</td>
</tr>
<tr>
<td>DETERING COYOTES</td>
<td>8</td>
</tr>
<tr>
<td>HAZING: AN INTERVENTION TECHNIQUE</td>
<td>9</td>
</tr>
<tr>
<td>COYOTE YARD AUDIT CHECKLIST</td>
<td>11</td>
</tr>
<tr>
<td>COYOTE BEHAVIOR CHART AND SUGGESTED RESPONSE</td>
<td>12</td>
</tr>
<tr>
<td>LETHAL CONTROL</td>
<td>14</td>
</tr>
</tbody>
</table>
INTRODUCTION & GOALS

The goal of this Coyote Management and Education Plan is to provide a program for reducing human-coyote conflicts while prioritizing human safety. The suggested actions outlined in this plan are designed to increase citizens’ knowledge and understanding of how coyotes behave and make clear how such behavior can be managed to reduce or eliminate conflicts with coyotes.

This Coyote Management and Education Plan is based on scientific research, a thorough understanding of coyote ecology and biology in urban settings, and the best known management practices and management tools. This plan is guided by the following basic principles:

1. Human safety is a priority in managing human-coyote interactions.

2. Coyotes serve an important role in ecosystems by helping to control the population of rodents, Canada geese, rabbits and other urban mammals.

3. Preventive practices such as reduction and removal of food attractants, habitat modification and responding appropriately when interacting with wildlife are key to minimizing potential interactions with coyotes.

4. Solutions for coyote conflicts must address both problematic coyote behaviors (such as aggression towards people and attacks on pets) and the problematic human behaviors (intentionally or unintentionally feeding coyotes and letting pets outside unattended) that contribute to conflicts.

5. Non-selective coyote removal programs are ineffective for reducing coyote population sizes or preventing human-coyote conflicts.

6. A community-wide program that involves residents is necessary for achieving success in reducing or eliminating conflicts with coyotes.

Monitoring and data collection are critical components of an effective coyote management plan. This is best accomplished with input from residents. The purpose of monitoring human-coyote interactions is to document where coyotes are frequently seen, to count how many coyotes are within an area, and to identify human-coyote conflict hotspots. Gathering specific data on incidents will allow for targeting of educational campaigns, conflict mitigation efforts, and the ability to measure success in reducing conflicts over time.

Tips and techniques are provided in this plan to help you with coyote hazing, a yard audit, and responding to specific coyote behavior. Additionally, Atlantic Beach Police Department personnel and volunteers are specially trained to assist you with the yard audit and/or hazing training. If you are interested in learning more, having a yard audit completed, or in hazing technique training, email wildlife@coab.us or call (904) 247-5859 and provide your name and a telephone number. A member of our team will respond to you.
Due to their intelligence and adaptability, in addition to extensive urbanization and the subsequent decline of larger predators, coyotes have successfully expanded their range across North America. Coyotes are now found in all states in the U.S. except Hawaii and have become well established in nearly every ecosystem. They live in deserts, swamps, tundra and grasslands, brush, dense forests, cities and suburbs. People can live among coyotes yet never see them. Often it’s only an evening chorus or group howling and yipping that alerts us to the presence of this wild canid in our neighborhoods. It is important to keep in mind that coyotes have been interacting with and adapting to people for at least the last 100 years.

Ecological importance

Coyotes are curious, smart and adaptable creatures and our urban areas provide the perfect balance of food, shelter and water for them. What you may not know is that even in fragmented and urbanized landscapes, coyotes can play an integral role in their environment by providing ecosystem services and helping to maintain species diversity. Coyotes in urban areas not only provide free rodent control by feeding on mice and rats, but also help to regulate the population size of raccoons and other species that may cause conflicts with people in urban areas.

General biology, reproduction and behavior

Appearance and signs. Most coyotes weigh approximately 25-35 pounds, although their long legs and thick fur make them appear larger. Coyote fur varies in color from gray-brown to yellow-gray. They have a black-tipped tail which helps to distinguish them from other canids such as foxes. Coyotes also have yellow/amber eyes (which help to distinguish them from domestic dogs), large ears and narrow, pointed muzzles (which help to distinguish them from wolves).

Since coyotes are naturally very skittish and afraid of humans, they are rarely seen. Thus, their signs (including prints, scat and vocalizations) may be a better indicator of their presence. Coyote prints are similar to those of a domestic dog’s, but are usually observed in a straight line (as opposed to the meandering path of domestic dog tracks). More commonly, coyote howling or other vocalizations may be heard. Coyotes produce a variety of sounds (including howls, barks, whines and yips) to communicate with one another and defend their territory. Small groups of coyotes (2-3) can distort their voices and sound like a group of 20. Coyotes also use scat (feces) to communicate by depositing it in the middle of a trail or on the edge of their territory. Coyote scat is similar to dog scat in size and appearance, but unlike dog scat, it is rope-like and typically filled with hairs, seeds and bones.

Diet. Coyotes are opportunistic omnivores with great flexibility in their diet. They generally hunt small mammals such as mice, rats, voles, rabbits and prairie dogs, but will also eat fruit and berries and will even scavenge road-killed animals. In urban areas, coyotes are also known to eat pet food, unsecured garbage and compost. They may also prey on unattended domestic pets such as cats and small dogs if given the opportunity. This does not indicate a danger to humans, but is rather a natural coyote behavior. This behavior can be prevented by reducing
human-associated food attractants in urban areas and not letting pets outside unattended (unless protected by a coyote-proof enclosure or fence).

**Social structure.** Most coyotes (called resident coyotes) live in family groups with one breeding pair and 3-4 other related individuals. Coyotes do not hunt in packs, but work together to defend their territory from other coyote family groups. Other coyotes (called transient coyotes) live alone or as an isolated mated pair. Coyotes mate once per year, during their breeding season (which occurs from January through March). During the pup season (April – August), the breeding pair will give birth to pups (typically in April or May). Litter size depends on available resources and the number of coyotes in the area. The average litter size is four to seven pups. Coyotes will place their pups in a den for the first six weeks, after which the pups will learn to hunt with their parents. Coyote dens are found in steep banks, rock crevices and underbrush, as well as in open areas. During dispersal season (September – December), the pups from the previous year (yearlings) will leave the family group and become transient coyotes in search of a new home range.

**Habitat.** Coyotes are naturally diurnal (most active at dawn and dusk), but often shift to more nocturnal activity in urban and suburban areas in an effort to avoid people. Coyotes prefer open space and natural preserve areas over human-dominated landscapes, but are extremely adept at living in proximity to people. Coyotes thrive in these areas because food, water, and shelter are abundant.

Home range sizes vary for each individual coyote. Research has shown that home range sizes for resident coyotes average 2-5 square miles, while transient coyotes have larger home ranges (averaging 10 square miles). Home range size can be an important indicator of resource distribution and abundance and also may correlate with population density.

---

**COYOTE ATTRACTANTS IN ATLANTIC BEACH**

**Why are coyotes drawn to urban and suburban areas like Atlantic Beach?**

**Food.** Urban areas provide a bounty of natural food choices for coyotes, who primarily eat rodents such as mice and rats. However, coyotes can be further attracted into suburban neighborhoods by human-associated food such as pet food, unsecured compost or trash, and fallen fruit in yards. Intentional and unintentional feeding can lead coyotes to associate humans with sources of food, which can result in negative interactions among coyotes, people and pets.

**Water.** Urban areas provide a year-round supply of water in the form of storm water impoundments and channels, artificial lakes, irrigation, pet water dishes, etc., which support both coyotes and their prey.

**Access to shelter.** Parks, greenbelts, open spaces, golf courses, buildings, sheds, decks and crawl spaces, etc., increase the amount and variability of cover for coyotes. They allow coyotes to safely and easily remain close to people, pets, homes and businesses without detection. In the spring, when coyotes give birth and begin to raise young, they concentrate their activities around dens or burrows in which their young are sheltered. Coyotes
may take advantage of available spaces under sheds or decks for use as a den, bringing them into close contact with people and pets.

**Unattended Pets.** Pets are a normal part of an urban landscape. Within their territory, coyotes may consider pets as potential prey or potential competitors.

- **Cats.** Coyotes primarily eat small mammals such as mice and rats, but will also prey on slightly larger mammals such as rabbits and groundhogs. Approximately the same size as a groundhog or rabbit, free-roaming outdoor cats may also be seen as eligible prey items by coyotes. It is important to note that attacks on cats are normal coyote behavior and do not indicate a danger for people. The only way to protect cats from coyotes (and the other dangers of outdoor life such as cars, disease, dogs and other wildlife) is to keep cats indoors (or only let them outside in a secure enclosure or when accompanied by a person and under the control of a leash and harness).

- **Feral cats.** People who feed feral cats are often concerned that 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.

- **Dogs** also can be vulnerable to coyote confrontations. These incidents generally involve coyotes who are accustomed or habituated to people (usually due to wildlife feeding), or coyotes who are protecting their territory and pups (usually during breeding season).
  
  - It is important to either keep dogs on a leash 6 feet long or shorter when outdoors or to stay within six feet of them when outside. (Coyotes may view a dog on a leash longer than six feet as an unattended pet.) Attacks on unattended, small dogs are normal coyote behavior and do not indicate a danger for people.

  - 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 let dogs outside unattended and to keep them on leashes (6 feet long or less) when in public areas.

  - Fences can help keep coyotes out of yards, although coyotes have been known to scale 6-foot barriers. “Coyote rollers” and other devices can help. To prevent coyotes from digging under a fence, the fence should extend underground at least 1 foot or include an L-shaped mesh apron that extends outward at least 18 inches and is secured with landscape staples.

- **Other domestic animals** kept outside, such as chickens and rabbits, may also be viewed as prey by coyotes. Safeguard these animals (and other predators) with protective fencing by ensuring they are confined in sturdy cages or pens each evening.
HUMAN-COYOTE CONFLICT DEFINITIONS

The City of Atlantic Beach utilizes the following Humane Society of the United States-accepted definitions for categorizing human-coyote conflicts:

**OBSERVATION**: The act of noticing signs of a coyote(s), such as tracks, scat, or vocalizations, but without visual observation of the coyote(s).

**SIGHTING**: A visual observation of a coyote(s). A sighting may occur at any time of the day or night.

**ENCOUNTER**: A direct meeting that is between human and coyote(s) with no physical contact and that is without incident.

**INCIDENT**: A conflict between a human and a coyote where the coyote exhibits any of the following behaviors: growling, baring teeth, lunging or making physical contact with the person. A human is not bitten.

**HUMAN ATTACK**: A human is bitten by a coyote. *Provoked*: An attack where the involved human encourages the coyote to engage. Examples include a human hand-feeding a coyote, approaching a coyote with pups or intervening in a coyote attack on a pet. *Unprovoked*: An attack where the involved human does not encourage the coyote to engage.

**PET ATTACK**: Coyote kills or injures a domestic pet. *Attended*: Pet is on a leash less than six feet in length or is in the presence of a person less than six feet away. *Unattended*: Pet is free-roaming, walking off-leash more than six feet from a person, or on a leash longer than six feet.

DETERMING COYOTES

What can I do to discourage coyotes from coming near me, my family or my pets?

**Education**. Educating yourself is a critical element of a successful coyote management plan. Education is the key to making appropriate decisions regarding safety and managing property and pets. This involves decreasing food attractants, taking precautions with pets and creating tolerance of normal coyote behavior. Brochures and informational pamphlets can be found at the City Hall and the Atlantic Beach Police Department.

**Training**. Train yourself and your family members on how to properly haze a coyote that comes near you or a family member. Coyote hazing is easy to do and can be taught to almost anyone. Hazing is an activity or series of activities that is conducted in an attempt to change behaviors of habituated coyotes and/or to re-instill a healthy fear of people in the local coyote population. Hazing techniques include generating loud noises, spraying water, shining bright lights, throwing objects, shouting, etc. Hazing can help maintain a coyote’s fear of humans.
and deter them from neighborhood spaces such as backyards and parks. If you are interested in learning how to properly haze a coyote, email wildlife@coab.us or call (904) 247-5859 and schedule a training session.

Deter. Deter coyotes from coming into your yard by never hand-feeding or otherwise deliberately feeding a coyote. Avoid feeding pets outside. Remove sources of pet food and water. If feeding pets outside is necessary, remove the bowl and any leftover food promptly. Never compost any meat or dairy (unless the compost is fully secured). Maintain good housekeeping, such as regularly raking areas around bird feeders, to 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 out overnight, trash cans are more likely to be tipped over and broken into. Bag especially attractive food wastes such as meat scraps or leftover pet food. If it is several days before garbage will be picked up, freeze temporarily or take to a dumpster or other secure storage container. Finally, remove outdoor water sources, such as water bowls.

HAZING: AN INTERVENTION TECHNIQUE

Hazing Methods

Basic Hazing. Consists of directly facing the coyote and being “big and loud” by waving your arms over your head, making loud noises or squirting the coyote with water until the coyote(s) chooses to leave. Using a variety of different hazing tools is critical because coyotes can become desensitized to the continued use of just one technique, sound or action. Basic hazing can be performed by anyone and includes the following techniques:

- Yelling and waving your arms while approaching the coyote
- Making loud noises with whistles, air horns, megaphones, soda cans filled with pennies, pots and pans
- Throwing projectiles such as sticks, small rocks, cans, tennis balls or rubber balls at the direction of the coyote
- Squirting water from a hose, water gun or spray bottle (with vinegar water)

High-Intensity Hazing: Consists of approaching the animal quickly and aggressively, throwing projectiles, paint balls, pepper balls, sling shots, clay pellets or pepper spray at the coyote. High-intensity hazing should only be carried out by trained professionals such as animal control and police officers. High-intensity hazing should be used in specific areas and only in response to more egregious incidents.

Additional Hazing Tips:

- Hazing is most effective when an individual coyote is hazed by a variety of people using a variety of tools and techniques.

- The coyote being hazed must be able to recognize that the potential threat is coming from a person. Therefore, hiding behind a bush and throwing rocks or hazing from inside a car or house (for example) isn’t effective.

- When hazed for the first time, a coyote may not respond at first or may run a short distance away. If this happens, it is important to continue hazing (and intensify the hazing if possible) until the coyote leaves the
area. Otherwise, the coyote will learn to wait until the person gives up. Inconsistent hazing will create an animal more resistant to hazing instead of reinforcing the notion that “people are scary.”

✓ Make sure to provide an escape route for the coyote. Do not corner the coyote or chase the animal in the direction of traffic or other people.

✓ A group of coyotes should be hazed in the same manner as a single coyote. In a group, there will always be a dominant coyote who will respond first, and once he runs away, the others will follow.

✓ Hazing efforts should be exaggerated at the beginning of a hazing program, but less effort will be needed as coyotes learn to avoid people and neighborhoods. Coyotes learn quickly, and their family members and pups will emulate their behavior, leading to a ripple effort throughout the local coyote population.

✓ Certain levels of hazing must always be maintained so that coyotes do not learn or return to unacceptable habits.

✓ Obviously sick or injured coyotes should not be hazed by the general public. In these cases, police or animal control officers should be contacted.

✓ People should never run from or ignore a coyote. Running from a coyote can initiate a chasing instinct, while ignoring a coyote creates habituation and negates the positive effects of hazing.

✓ It is important to identify and remove possible coyote attractants in conjunction with hazing. Hazing will be less effective if food attractants are plentiful in a neighborhood.

Atlantic Beach Police Department personnel and volunteers are specially trained to assist residents with hazing technique training. If you are interested in receiving this training, email wildlife@coab.us or call (904) 247-5859.
We encourage you to take steps to eliminate attractants on your property in order to minimize conflicts with coyotes. We also urge you to share this information with friends and neighbors because minimizing conflicts is most effective when the entire neighborhood works together.

This checklist is adapted from a similar document developed by the Humane Society of the United States. If you would like assistance completing this checklist, or have any questions, email wildlife@coab.us or call (904) 247-5859.

<table>
<thead>
<tr>
<th>OK</th>
<th>FIX</th>
<th>Ways to Mitigate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD:</td>
<td>Pet Food</td>
<td>Never hand-feed or intentionally feed a coyote!</td>
</tr>
<tr>
<td></td>
<td>Bird Feeders</td>
<td>Never feed pets outdoors; store all pet food securely indoors.</td>
</tr>
<tr>
<td></td>
<td>Fallen Fruit</td>
<td>Remove bird feeders or clean fallen seed to reduce the presence of small mammals that coyotes prefer to eat.</td>
</tr>
<tr>
<td></td>
<td>Compost</td>
<td>Clean up fallen fruit around trees.</td>
</tr>
<tr>
<td></td>
<td>BBQ Grills</td>
<td>Do not include meat or dairy among compost contents unless fully enclosed.</td>
</tr>
<tr>
<td></td>
<td>Trash</td>
<td>Clean up food around barbeque grills after each use.</td>
</tr>
<tr>
<td>WATER:</td>
<td></td>
<td>Secure all trash containers with locking lids and place curbside the morning of trash pick-up. Periodically clean cans to reduce residual odors.</td>
</tr>
<tr>
<td>SHELTER:</td>
<td>Landscaping</td>
<td>Trim vegetation to reduce hiding places and potential den sites.</td>
</tr>
<tr>
<td></td>
<td>Structures/Outbuildings</td>
<td>Restrict access under decks and sheds, around woodpiles, or any other structure than can provide cover or denning sites for coyotes or their prey.</td>
</tr>
<tr>
<td>FENCING:</td>
<td></td>
<td>Enclose property with a 6 ft. fence with an additional extension or roller-top to deter coyotes. Ensure that there are no gaps and that the bottom of the fence extends underground 6 inches or is fitted with a mesh apron to deter coyotes from digging underneath.</td>
</tr>
<tr>
<td>PETS</td>
<td></td>
<td>Never leave pets unattended outside.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never allow pets to “play” with coyotes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fully enclose outdoor pet kennels.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walk pets on a leash no longer than 6 feet in length.</td>
</tr>
</tbody>
</table>
# COYOTE BEHAVIOR CHART AND SUGGESTED RESPONSE

The City of Atlantic Beach is utilizing these guidelines recommended by the Humane Society of the United States. If you have any questions or would like more information about this chart, email wildlife@coab.us or call (904) 247-5859.

<table>
<thead>
<tr>
<th>Coyote Behavior</th>
<th>Classification</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coyote heard; scat or prints seen</td>
<td>Observation</td>
<td>Distribute educational materials and information on normal coyote behavior.</td>
</tr>
<tr>
<td>Coyote seen moving through the area (day or night)</td>
<td>Sighting</td>
<td>Distribute education materials and information on normal coyote behavior.</td>
</tr>
<tr>
<td>Coyote seen resting in area (day or night)</td>
<td>Sighting</td>
<td>If area frequented by people, educate on normal coyote behavior and how to haze to encourage animal to leave. Look for and eliminate attractants.</td>
</tr>
<tr>
<td>Coyote entering a yard (no person present)</td>
<td>Sighting</td>
<td>Educate on coyote attractants; provide hazing information and yard audit*.</td>
</tr>
<tr>
<td>Coyote following or approaching a person with no incident</td>
<td>Encounter</td>
<td>Educate on hazing techniques. Look for and eliminate attractants.</td>
</tr>
<tr>
<td>Coyote following or approaching a person and pet with no incident</td>
<td>Encounter</td>
<td>Educate on hazing techniques and pet management. If an open area, post education signs to alert other residents to keep dogs on leash and to haze coyotes. If it is pup season and there is a known den nearby, consider blocking off the path or area until pup season is over.</td>
</tr>
<tr>
<td>Coyote entering a yard with pets, no incident</td>
<td>Encounter</td>
<td>Educate on coyote attractants and pet management, provide hazing information and yard audit*.</td>
</tr>
<tr>
<td>Coyote entering yard with people and pets, no pet attack occurring</td>
<td>Encounter</td>
<td>Gather information on specific animals involved and report circumstances. Educate on coyote attractants and pet management, provide hazing information and yard audit*.</td>
</tr>
<tr>
<td>Coyote injures or kills unattended pet in back yard</td>
<td>Unattended Pet Attack</td>
<td>Gather information on specific animals involved and report circumstances. Educate on coyote attractants and pet management, provide hazing information and yard audit*.</td>
</tr>
<tr>
<td>Coyote injures or kills pet off-leash in open space area</td>
<td>Unattended Pet Attack</td>
<td>Gather information on specific animals involved and report circumstances. Educate on pet management and hazing, Look for and eliminate food attractants. Post education signs in open area to alert other residents to keep dogs on leash and to haze coyotes. If it is pup season and there is a known den nearby, consider blocking off the path or area until pup season is over.</td>
</tr>
<tr>
<td>Coyote injures or kills livestock</td>
<td>Livestock Loss/Depredation</td>
<td>Gather information on specific animals involved and report circumstances. Educate on proper livestock husbandry (including the use of secure enclosures, livestock guarding animals, and/or proper fencing).</td>
</tr>
<tr>
<td>Coyote Behavior</td>
<td>Classification</td>
<td>Response</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Coyote injures or kills pet off-leash with human nearby (within 6 feet)</td>
<td>Attended Pet Attack</td>
<td>Gather information on specific animals involved and report circumstances. Educate on pet management, coyote attractants and hazing. Perform yard/neighborhood/public area audit. Post education signs and/or send educational materials to residents in the area. Implement high intensity hazing techniques (by ACOs, police, etc.)—using rubber bullets, paintball guns, etc.</td>
</tr>
<tr>
<td>Coyote injures or kills pet on-leash (within 6 feet)</td>
<td>Attended Pet Attack</td>
<td>Gather information on specific animals involved and report circumstances. Educate on pet management, coyote attractants and hazing. Perform yard/neighborhood/public area audit. Post education signs and/or send educational materials to residents in the area. Implement high intensity hazing techniques (by ACOs, police, etc.)—using rubber bullets, paintball guns, etc.</td>
</tr>
<tr>
<td>Coyote aggressive toward person, showing teeth, back fur raised, lunging, nipping without contact</td>
<td>Incident</td>
<td>Gather information on specific animals involved and report circumstances. Educate on pet management, coyote attractants and hazing. Perform yard/neighborhood/public area audit. Post education signs and/or send educational materials to residents in the area. Implement high intensity hazing techniques (by ACOs, police, etc.)—using rubber bullets, paintball guns, etc.</td>
</tr>
<tr>
<td>Coyote has bitten human (Human encouraged coyote to engage by hand feeding, approaching coyote with pups, intervening during pet attack, etc.)</td>
<td>Provoked Human Attack</td>
<td>Identify and gather information on all details of attack (including action of victim before and after attack, whether feeding or pets were involved, action of victim towards coyote and how incident was resolved.) Any human bitten by a coyote(s) will need to seek the advice of their physician concerning the administration of a post-exposure rabies vaccination. If the offending coyote is killed, he/she should not only be tested for rabies, but should be also given a full necropsy (to determine general health and whether feeding was involved). Educate residents on coyote attractants, yard/neighborhood audits, hazing and pet management. Levy fines (for wildlife feeding or leash law violations) when appropriate. Implement high-intensity hazing techniques (by ACOs, police, etc.)—using rubber bullets, paintball guns, etc. for any other habituated or bold coyotes in area.</td>
</tr>
<tr>
<td>Coyote has bitten human (Human did not encourage coyote to engage)</td>
<td>Unprovoked Human Attack</td>
<td>Identify and gather information on all details of attack (including action of victim before and after attack, whether feeding or pets were involved, action of victim towards coyote and how incident was resolved.) Any human bitten by a coyote(s) will need to seek the advice of their physician concerning the administration of a post-exposure rabies vaccination. If the offending coyote is killed, he/she should not only be tested for rabies, but should be also given a full necropsy (to determine general health and whether feeding was involved). Lethal control efforts, if implemented, should focus on the offending coyote(s), rather than the coyote population at large. Educate residents on coyote attractants, yard/neighborhood audits, hazing and pet management. Levy fines (for wildlife feeding or leash law violations) when appropriate. Implement high-intensity hazing techniques (by ACOs, police, etc.)—using rubber bullets, paintball guns, etc. for any other habituated or bold coyotes in area.</td>
</tr>
</tbody>
</table>
LETHAL CONTROL

Lethal control programs may seem like a quick fix to problems among coyotes, people and pets. However, removal programs are not effective in reducing coyote populations or addressing the root causes of conflicts.

When implementing lethal control, it is extremely difficult to ensure that problem-causing coyote(s) will be the ones located and killed. Since firearms are usually unsafe to use in populated areas, traps (which are by design non-selective for particular coyotes) are generally the method used. Because coyotes are so intelligent and wary of human scent, it is very difficult to catch any coyote in a trap, never mind the problem-causing coyote.

Research shows that when lethally controlled, coyotes exhibit a “rebound effect” (a surge in their reproductive rates), allowing for quick regeneration of their population numbers. The disruption of their family group structure leads to an increase in the number of females breeding in the population, and the increase in available resources leads to larger litter sizes, earlier breeding ages among females and higher survival rates among pups. In addition, the removed coyotes will quickly be replaced by transient coyotes looking for a vacant home range. This allows coyote populations to bounce back quickly, even when as much as 70 percent of their numbers are removed through lethal control efforts. For these reasons, lethal programs are not effective at reducing coyote populations, and non-selective coyote trapping programs are not effective at solving conflicts.

Coyote removal should be considered only in the event of an unprovoked, confirmed attack on a human. If implemented, lethal control efforts should focus on the offending coyote(s) only, rather than the entire coyote population. This requires significant surveillance efforts to make sure that the correct animal(s) is targeted and removed.

If non-lethal control techniques are effective enough to reduce human-coyote interactions and conflicts to acceptable levels, then the lethal control limited option may remain in the toolbox without being used.

If you have any questions or would like additional information, email wildlife@coab.us or call (904) 247-5859.