Coyotes in the Urban Environment, Workshop #2 May 28, 2021

Workshop Background Materials and Resources

This document provides links to materials and resources for the second of a two-part **Coyotes** in the **Urban Environment Workshop** series being offered by the California Fish and Game Commission (Commission) and California Department of Fish and Wildlife (CDFW). This second workshop will explore sample coyote educational campaigns and developing coyote management plans.

Technical Assistance from CDFW

CDFW has jurisdiction over the conservation, protection and management of fish, wildlife, plants, and habitat necessary for biologically-sustainable populations of those species. These natural resources are held in trust for the people of the state of California. As the state's trustee agency for fish and wildlife, CDFW is responsible for providing biological expertise and technical assistance.

CDFW Role and Responsibilities

- Serves as the principal state agency contact for wildlife issues in all counties and communities.
- Provides technical assistance and subject matter expertise as the lead state agency charged with helping to resolve human-wildlife conflict, public safety, and depredation problems.
- Assists with the development of integrated wildlife management plans and adaptive management strategies to help address human-wildlife conflict at the community-level.
- Advises local governments, commissions, and working groups regarding human-wildlife conflicts to help resolve related biological, technical, and conservation issues.
- Educates the public about wildlife conservation and wildlife public safety issues, and inspires a conservation ethic in present and future generations through public outreach.
- Participates in the development of strategies to monitor, assess, reduce, and manage wildlife disease, using an "One Health" approach to address potential conflict.
- Helps establish a robust framework to maintain lasting partnerships with a broad array of governments, agencies, organizations, businesses, and citizens.
- Promotes partnerships with federal, state, and local agencies; and nongovernmental organizations with aligned conservation goals to address human-wildlife conflict at the community-level.
- Provides resources, applies adaptive management techniques, and coordinates efforts with partners to support safe and sustainable human-wildlife interactions (coexistence).

Coyotes in the Urban Environment Frequently Asked Questions

California Department of Fish and Wildlife (CDFW)

Who can I contact to report concerns about a coyote?

Who you contact depends on your concern. If it is:

- Public Safety (human attack, attempted bite, or other immediate aggressive behavior toward people), immediately call 9-1-1.
- Animal Welfare (injured, sick, orphaned), call your local Animal Services Division, a
 permitted wildlife rehabilitation facility, and/or CDFW regional office.
- Animal Welfare (den with pups near people), call your local Animal Services Division, a
 permitted wildlife rehabilitation facility, and/or CDFW regional office. Note that if a
 domestic dog ventures near a den site, it will be perceived by adult coyotes as a direct
 threat to the coyote pups. Leashing family pets keeps them safe and protects young
 wildlife that are vulnerable to dog attacks.
- Pet Loss, call your city's reporting line (if applicable) and local Animal Services Division
 and report it to the statewide, online CDFW Wildlife Incident Reporting System for
 incident tracking, monitoring, and technical assistance.
- Potential Conflict, where a coyote is approaching people in a non-aggressive manner and/or near people (e.g., backyard, busy park), consider hazing to deter it. See guidance here.
- Sighting, a coyote that is simply present in a neighborhood, or in the vicinity of people and exhibiting normal behaviors, is no reason for alarm. Coyotes are a widespread native species found in diverse environments statewide. Plentiful resources exist in urban areas such as water, rodents, rabbits, and squirrels. Urban coyotes are also attracted to unsecured human-associated foods, such as garbage, pet food, bird feeders, gardens, and compost piles. Unattended pets, small or exotic livestock, and poultry (e.g., backyard chickens, llamas, goats) may also be an attractant and potential food source. Try removing any potential sources of food or water to discourage the coyote from returning.

What is a coyote management plan?

A human-wildlife conflict management plan is designed to serve as guidance for strategies that will balance respect for, and protection of, wildlife and their habitats, while prioritizing public safety. Management plans provide a description of the objectives that will be accomplished through (1) public education designed around co-existence with wildlife; (2) enforcement of related laws and regulations (such as prohibiting the feeding of wildlife); and (3) ensuring public safety by implementing appropriate stepwise responses to reported wildlife incidents or human-wildlife interactions. A properly prepared plan will direct the management objectives in a manner that strikes a balance between the needs of wildlife populations and the needs of people.

There are various approaches that may be taken to address human-wildlife conflicts and the costs imposed by wildlife on humans. In most cases, however, the process of developing a management plan jointly with stakeholders within communities affected by wildlife will be crucial. Important aspects of the management plan process include identifying and meaningfully engaging key stakeholders throughout the process, collecting accurate information on an appropriate scale, analyzing costs and impacts of conflict, testing and adapting strategies, monitoring the effectiveness of mitigation techniques, ensuring effective communication, building trust. Eliminating human-wildlife conflicts should not be an expectation of human-wildlife conflict management. Rather, we need to effectively reduce these conflicts to a level where communities are willing to tolerate long-term coexistence with wildlife.

What can be done to reduce the number of coyotes in my city?

The urban environment provides ample habitat for coyotes. They have adapted to not only live, but to thrive in residential communities. Availability of habitat dictates how many coyotes are in an area, and human food sources greatly increase the carrying capacity of the urban habitat. Typically, trapping programs are expensive and time consuming. Coyotes are notoriously trapshy, making them very difficult to capture. Effective long-term population suppression is rarely achievable, because a high percentage of the population must be consistently euthanized. Even the most focused eradication efforts cannot remove all the coyotes in an area. In areas where coyotes are removed, this opens a niche that can be quickly filled by surrounding populations. With collaborative efforts, we aim to influence people's actions and as a result we expect coyote behaviors to change away from attacking pets and back to preying upon natural prey.

Can urban coyotes be relocated out of the city?

No. Pursuant to Title 14, California Code of Regulations Section 465.5, it is unlawful to trap and relocate furbearing and non-game animals. Studies show coyote relocation is not effective and a relocated coyote can travel hundreds of miles back to their home range. Relocation is stressful and unsuccessful for a coyote (chances are it will be moved into an established coyote's territory, making survival unlikely) and can also pose a risk to personnel during the capture and restraint of the animal. Wildlife relocation can also spread disease from one location to another. All nongame mammals, such as coyotes, that are legal to trap must be immediately killed or released. Unless released, trapped animals shall be killed by shooting where local ordinances, landowners, and safety allow. Employees of federal, state, or local government may use chemical euthanasia to dispatch trapped animals.

The Department of Fish and Wildlife does not interfere with the natural movements and activities of wildlife, unless extraordinary circumstances exist. Pragmatically, the location and movements of *all* coyotes within a given area would be virtually impossible to determine. There is no effective method for keeping coyotes out of urban areas. However, with best management practices and active community participation, coyotes can remain "wild" and avoid humans, and people can learn to coexist with wildlife.

How can my city enforce wildlife laws and potential violations?

Local law enforcement, code enforcement, and animal services officers have the authority to enforce state and local wildlife laws, regulations, and ordinances. They may work with CDFW wildlife officers and staff. Local municipalities may pass additional local ordinances that are more restrictive and/or specific to potential wildlife violations. Depending on your local laws, potential enforcement actions could entail:

- Harassment (an intentional act that disrupts an animal's normal behavior patterns, including but not limited to breeding, feeding, or sheltering)
- Feeding of wildlife
- Animal cruelty
- Trapping
- Regulated take (game/nongame)
- Interference with lawful activities
- Other city/county ordinances

Why should my city invest resources to address and/or reduce conflict with coyotes?

As public servants and resource stewards, community leaders can demonstrate proactive leadership at the community level to help support safe, sustainable human-wildlife interactions. Educational programs and integrated coyote management plans are important tools to address and/or reduce potential conflict. They are aimed at promoting a wider appreciation of wildlife, an understanding of human-wildlife conflict in urban areas and steps communities can take towards coexistence. Using education and awareness, the goal is to reduce the prevalence of human-wildlife conflicts in urban areas and foster more positive relationships between people and the wild species with which we share our spaces. Improving wildlife literacy can help to lessen hostility and reduce antagonism toward certain species, while informing individuals of how to appropriately respond when encountering wildlife. Concerted educational programs will better equip humans with techniques to mitigate conflicts and prepare them to *interpret* these situations differently. With greater understanding of natural history and mitigation solutions, conflicts can be diminished, and only then can we move toward coexistence.

Can a private citizen kill a coyote on their property?

See Fish and Game Code sections <u>4004</u>. <u>Unlawful methods of take</u> and <u>4152</u>. <u>Depredation</u> <u>take of nongame mammals</u>; and Title 14, California Code of Regulations, Section <u>465.5</u>. <u>Use</u> of traps:

- State law allows landowners to take (kill) coyotes that cause property damage (depredation) on their property. To legally take (kill) coyotes due to property damage, property owners must abide by all relevant state and local laws. Incidentally, coyotes are one of the most difficult animals to live trap.
 - Property owners may contact their city/county to confirm available resources (e.g., licensed trapper on city staff, county agricultural commissioner).

- Property owners may hire a licensed private trapper. Professional trappers may not trap and relocate animals elsewhere. Trappers are required by law to kill the animal.
- A property owner may attempt to trap the animal themselves. Property owners must contact CDFW to obtain a depredation trap number assigned to their trap. The coyote must be humanely euthanized once captured; relocation is not an option.
- Cities and counties may have ordinances prohibiting, limiting, or otherwise regulating the discharge of a firearm or use of a trap within city limits.
- An owner or tenant of a premise or an employee and agent in immediate possession of written permission from an owner or tenant, who is in compliance with all other applicable laws, may trap a coyote to protect human health or safety or to protect property, even if the coyote has not harmed any human or damaged any property.

Can my city run a coyote trapping program?

Yes. Coyotes that are "found to be injuring growing crops or other property may be taken at any time or in any manner in accordance with this code and regulations adopted pursuant to this code by officers or employees of the Department of Food and Agriculture or by federal, county, or city officers or employees when acting in their official capacities" (Fish and Game Code Section 4152. Depredation take of nongame mammals).

- Local municipalities must ensure CEQA compliance.
- Coyotes must be euthanized once captured; relocation is not an option.
- Public safety incident responses to remove offending animal must be coordinated with CDFW.
- Incident responses regarding diseased animals (e.g., mange, rabies) or other animal
 welfare issues which could present public safety issues should either be handled at a
 local level (in coordination with CDFW) or by CDFW directly.

References and Helpful Links

The information presented in this section is provided as a public service but is neither a legal interpretation nor a statement of policy by the California Fish and Game Commission or California Department of Fish and Wildlife. Inclusion of or reference to any specific information does not imply endorsement of that information.

Trapping Information

<u>Trapping Laws and Regulations</u> (DFW 1389d, revised 1/20/20, which provides essential information about trapping, but not all trapping laws and regulations)

AB 273 bill text, chaptered in 2019, that added a prohibition on trapping any fur-bearing mammal or nongame mammal for purposes of recreation or commerce in fur and added a prohibition on the sale of the raw fur of any fur-bearing mammal or nongame mammal otherwise lawfully taken pursuant to the Fish and Game Code or regulations adopted pursuant to that code.

California Fish and Game Code

Section 2009. Interference with lawful take

Section 2016. Unlawful to trespass

Section 2019. Bounties

Section 3000. Hours for taking nongame

Section 3003.1. Types of traps

Section 3003.5. Hazing

Section 3004. Safety zone

Section 3007. License requirement

Section 4004. Unlawful methods of take

Section 4005. Trapping license requirements

Section 4009. Remove or disturb a lawful trap

Section 4150. Nongame mammals

Section 4152. Depredation take of nongame mammals

California Code of Regulations

Section 251.1. Harassment of Animals, hazing exception

Section 465.5. Use of traps

Section 472. General provisions

Section 473. Possession of nongame

Section 474. Hours for taking nongame

Section 475. Methods for taking nongame

Wildlife Watch Materials

https://wildlife.ca.gov/Wildlife-Watch

Wildlife Watch is modeled after the National Neighborhood Watch program, a program model that joins together local law enforcement agencies, private organizations, and residents to reduce crime and improve local communities.

Wildlife Watch empowers local agencies and residents to address and resolve human-wildlife conflicts in their own community. Communities are provided the support and training needed to develop integrated wildlife management plans specific to their constituent needs. Wildlife Watch is maintained by a network of committed agencies, community groups and individuals who have completed the required training.

Wildlife Watch's original focus was to address and reduce human-coyote conflicts in urban areas. It has expanded to serve diverse local communities throughout the state to address human-wildlife interactions for many other species as well, such as black bear, mountain lion, deer, elk and kit fox.

Project Coyote Materials

Project Coyote is a national non-profit organization based in northern California whose mission is to promote compassionate conservation and coexistence between people and wildlife through education, science and advocacy.

See the next pages for Project Coyote educational materials.



BE COYOTE AWARE

THEIR LIVES AND YOUR SAFETY DEPEND ON YOU

Coyotes are common throughout North America, including in urban areas. You may see and hear them more during mating season (Dec-Feb) and when juveniles are dispersing from family groups (Sept-Nov). These facts and safety tips will help increase comfort and decrease conflicts when living or recreating near North America's native "Song Dog."

FACTS

- Coyotes are members of the dog family; they are curious, adaptable, and learn quickly.
- Coyotes often mate for life, are devoted parents, and are highly communicative (barks, yips, howls).
- Coyotes weigh 18-35 pounds in the West and 30-60 pounds in the East. They live alone, in pairs, or in small family groups.
- Coyotes eat large numbers of rodents, as well as fruit, vegetation, insects and carrion. They help keep ecosystems vital, healthy and clean.

SAFETY

- DON'T FEED COYOTES. Their life and your safety depend on coyotes remaining wild and naturally wary of people.
- Coyotes may be more protective of dens/ territories during pup rearing (April-Aug). Walk dogs on leashes. Pick up your small dog if you see a coyote.
- If approached, don't run. Wave arms, make noise and walk toward the coyote until he retreats. Be "Big, Bad and Loud."
- Do not attract a coyote; pick up trash.
- Appreciate coyotes from a distance. Share this information with family and friends.

DO NOT FEED COYOTES. HELP KEEP THEM WILD AND WARY!



DOGS AND COYOTES

What you need to know

Coyotes are common in urban areas. Understanding canine behavior and modifying our own behavior is essential to peaceful coexistence with our wild neighbors.

UNDERSTANDING COYOTE BEHAVIOR

- Most interactions with coyotes in urban areas result from the presence of a dog, and/or from intentional or unintentional food availability.
- Coyotes are much like our domestic dogs and share similar behaviors. Curiosity and play are often misinterpreted as being "bold" or agressive.
- Coyotes are naturally timid, but may view dogs as a threat or as competitors for territories, and for resources. They may defend their mates, their territory, and their pups during breeding season (winter) and pup rearing season (spring & summer). Understandably, they have a young family to protect.
- Coyotes may attempt to escort or divert your dog away from a den site or a food resource. Coyotes do not want to injure themselves, so they may put on a show to get your dog to move along, including a bluff charge or hunching the back, dropping the head and showing teeth. These "threat displays" are intended to scare your dog away without the risk of making physical contact. If the dog doesn't move away, or engages the coyote, the threat may escalate. Keep in mind that coyotes in the West weigh only 18-35 pounds!
- Coyotes' primary food sources in our cities include rats, gophers, insects, fruit. But human and pet foods (and water) may attract coyotes, so eliminate these attractants to reduce negative encounters.
- Many confrontational behaviors are seasonal, and are often a result of bold dog behavior.

How to COEXIST

- Never let your dog chase or play with a coyote.
- In an area where coyotes have been seen, keep your dog closer to you than usual, and keep them under full control (voice-control or leash) at all times.
- Be aware of what is happening around you and what your dog is doing at all times.
- To protect your small dog, in coyote areas:
 - · Avoid using a flexi-leash
 - Avoid walking near bushy areas or "edge zones"
 - Stand or walk with other people, and/or larger dogs
 - · Avoid walking small dogs at dawn
- If a coyote gets too close for your comfort, and you can make and maintain eye contact, leash your larger dog or pick up your small dog, and haze the coyote (learn how to do this correctly using our Coyote Hazing Field Guide). If the coyote doesn't leave, it's likely there's a den, pups, or food source that the coyote is protecting. Don't run. Leave the area calmly. Change your routine to avoid this challenging area for awhile.
- If a coyote performs a threat display, or two or more coyotes charge your larger dog(s), leash up, leave the area calmly, and report it to your local animal control or humane society.

Open spaces and urban areas belong to all of us — people, dogs and wildlife. By being responsible dog guardians and minimizing dog interactions with coyotes, we can give each other "breathing room" and peacefully coexist.

PROJECT COYOTE. ORG

Project Coyote is a national coalition of scientists and educators working together to help communities coexist peacefully with wildlife in urban and rural environments.



DOGS AND COYOTES: estrument

NORMAL URBAN COYOTE BEHAVIOR

- Active in the daytime and nighttime
- Most active at dusk and dawn
- Watching you and your dog in plain view or from a camoflauged position (like dogs, coyotes are curious)
- Sitting on a hill in plain view
- Relaxing or playing in a field or other grassy area
- · Walking and not paying attention to you
- Following you and your dog with curiosity from a comfortable distance
- · Hunting gophers in fields and meadows
- "Escorting" your dog away from den/territory, food or pups during pup rearing season (spring & summer)
- Bluff charging your dog in an attempt to move your dog away from pups, during pup rearing season (spring & summer)
- Standing his or her ground unfazed by your attempts to scare him/her away, during pup rearing season (spring & summer)
- Waiting at stop lights to cross busy streets
- Dashing across a trail
- More than one coyote relaxing together or greeting each other
- Hearing coyotes howling and yipping (they are greeting, communicating and defining territories)
- When hazed, trots away, then stops and looks back (keep hazing until the coyote leaves)

WHEN TO TAKE ACTION (HAZE)

- If a coyote approaches to a proximity that you feel
 is uncomfortable and you can make and maintain
 eye contact, do not turn and run, haze the coyote
 according to our Coyote Hazing Field Guide, available
 in SF parks or download from ProjectCoyote.org
- When coyote seems interested in the food you are carrying, even if he doesn't approach, but hangs around appearing to wait for a handout
- Coyote is in your yard, unless you think there could be a den on your property

QUICK COYOTE HAZING TOOLS

- Surprise with a pop-up umbrella or simple noise maker (keep a penny in a shiny soda can and shake!).
- Wave your arms overhead, make direct eye contact and yell, "Go away coyote!" Don't stop until the coyote leaves.
- Pick up your small dog or put your large dog behind you before you haze so that the coyote focuses on you and your message.
- Download our Coyote Hazing Field Guide from ProjectCoyote.org to learn the why, when, where, and how of correcting unusual coyote behavior. Hazing must be done correctly and consistently to be effective.
- Living well with our wild neighbors is a community effort; please share this information widely!





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"Coyotes have much to teach us about peaceful coexistence & this is largely about altering human behavior & better understanding coyote behavior."

"Dr. Marc Bekoff,

Project Coyote Science Advisory Board

Coexistence is an active neighborhood effort.

Help your neighborhood by sharing this brochure and by downloading the free resources available at www.ProjectCoyote.org/resources

Help keep coyotes wild.

Look around what unnatura food sources may you be offering wildlife? A fed coyote is a dead coyote.



COYOTE ENCOUNTERS

Coyotes are usually wary of people and will avoid us whenever possible. Bold behavior is unusual and is most often a result of habituation due to intentional or unintentional feeding, the presence of a dog, or the coyote defending a den and young. If you encounter a coyote, remember the following:

- Never feed or try to "tame" a coyote; appreciate coyotes from a distance.
- Walk dogs on leashes; pick up small dogs if a coyote is near.
- If approached, be BIG and LOUD. You can also scare the animal by blowing a whistle, shaking a can with coins inside, popping open an umbrella, or throwing objects (toward but not at the coyote). Do not run from a coyote; calmly leave the area.

COYOTE CONFLICTS

The very traits that have allowed coyotes to thrive, adapt, and coexist with people even in the most populated regions of North America have also led to conflicts with us and our domestic animals. Most coyotes fear people. However, those who associate people with food may become habituated to our presence. The abundance of food, water, and shelter offered by urban landscapes—coupled with unsecured garbage, unfenced gardens, and unattended domestic animals can lead to conflicts. Documented cases of covotes injuring people are very rare and most often related to people intentionally or unintentionally feeding them and/or the presence of a dog. Coyotes become more active, vocal, and territorial during mating and pupping seasons (see chart reverse). Pay particular attention to your companion animals' safety during these times and do not let them roam.

COYOTE MANAGEMENT

Historically, our society has attempted to solve humancoyote conflicts through killing. However, despite decades of poisoning, trapping, and shooting coyotes, there are more coyotes in North America today. Why?

The coyote's remarkable success appears to be closely related to human attempts to control their populations. As with many wild species, coyote populations are naturally regulated by available food and habitat. Lethal control, however, can disrupt the group hierarchy, allowing more coyotes to reproduce, encouraging larger litter sizes because of decreased competition for food and habitat, and increasing pup survival rates. It is also highly likely that lethal control favors the survival of the most resilient and genetically robust coyotes.

At least half a million coyotes are killed each year—one per minute—by federal, state and local governments and by private individuals in North America. The U.S. Department of Agriculture's Wildlife Services program kills approximately 90,000 coyotes each year. Most of this killing is carried out in the name of "livestock protection" and is a taxpayer subsidy for agribusiness/ranchers.

Despite scientific evidence suggesting this approach is misguided and ultimately ineffective, the emphasis on lethal coyote control persists. Coyotes are also killed for their fur, for "sport," and in "body-count" contests where prizes are awarded for killing the most coyotes. Most states set no limit on the number of coyotes that may be killed, nor do they regulate the killing methods.

Killing to reduce coyote populations or relocating individual coyotes is not recommended. Disruption of family groups can cause more coyotes to be born or increase pup survival rates; orphaned juveniles may act unpredictably and other coyotes will simply move into vacant areas.

EDUCATED COEXISTENCE

Urban landscapes offer an abundance of food, water, and shelter for coyotes. Take the following steps to prevent coyotes from being attracted to your home.

- Wildlife-proof garbage in sturdy containers with tight fitting lids.
- Don't leave pet food outside.
- Take out trash the morning pick up is scheduled.
- Keep compost in secure containers.
- Keep fallen fruit off the ground. Coyotes eat fruit.
- Keep birdseed off the ground; seeds attract rodents which then attract coyotes. Remove feeders if coyotes are seen in your yard.
- Keep barbecue grills clean.
- Eliminate accessible water sources.
- Clear away brush and dense weeds near buildings.
- Close off crawl spaces under decks and around buildings where coyotes may den.
- If you frequently see a coyote in your yard, make loud noises with pots, pans, or air horns, and haze the coyote with a water hose.
- Share this list with your neighbors; coexistence is a neighborhood effort.

APPROXIMATELY ONE COYOTE IS KILLED EVERY MINUTE OF EVERY DAY. HELP STOP THE KILLING BY PRACTICING PEACEFUL COEXISTENCE AND SUPPORTING PROJECT COYOTE.



Coexisting with Coyotes





COYOTE ECOLOGY

Two hundred years of costly persecution has not eliminated the resilient coyote from our landscape. In fact, coyotes have expanded their range two to threefold since the 1850s, largely in response to human changes to the environment and the eradication of wolves. Coyotes have adapted to living close to people and now inhabit even the most densely populated metropolitan cities from Boston to San Francisco, Austin, and Seattle. Estimates are that 2,000 coyotes are on self appointed "rat patrol" in the Chicago metropolitan area.

At least 19 subspecies of covote roam North and Central America, from California to Newfoundland and Alaska to Panama, occupying a broad range of habitats. Coyotes play an important ecological role helping to maintain healthy ecosystems and species diversity. As the top carnivore in some ecosystems, coyotes help regulate the number of mesocarnivores (such as skunks, raccoons, and foxes) which helps to boost biodiversity.

Western coyotes typically weigh 18 to 30 pounds and look similar to a small Shepherd or collie type dog but have longer, denser fur and pointed, erect ears. Coyotes have a long, bushy, black tipped tail that is usually carried pointed down. Their eastern counterparts may be larger, averaging 35 55 pounds, which is believed to be a result of interbreeding with wolves 50 70 years ago. Coyotes are usually grayish brown with reddish tinges behind the ears and around the face, but coloration can vary from silver gray to black.



Livestock guard animals can effectively reduce or eliminate coyote conflicts on farms and ranches.



LIFE HISTORY

Covotes may live as solitary individuals, in pairs, or in small family groups, both in rural and urban areas. Coyotes are generally monogamous, with pair bonds frequently lasting for many years, and some for life. Both male and female coyotes actively maintain territories that may vary in size from 2 to 30 square miles.

Reproduction is generally once per year and limited to the group's leaders, while other females remain behaviorally sterile. Breeding season peaks in mid February, followed by 4-8 pups born in a den in April or May. Pup mortality is high, with an average of 50-70% dying within their first year. Some juveniles disperse in late fall to seek new territory, and some individuals remain with their parents and form the basis of the pack.

COYOTE LIFE CYCLE

Dec-Feb **Breeding Activity** Feb-Apr Den Site Selection Apr—May Birthing

May-Aug Raising Pups Sep-Nov Pup Dispersal

DISEASE CONCERNS Rabies is rare and coyotes are not commonly implicated in the transmission of the disease to humans or domestic animals.

FOOD

Coyotes eat a wide variety of food, and like most animals, prefer food that is easiest to obtain. They are true omnivores, and will eat a wide variety of foods, including rodents, rabbits, insects, lizards, snakes, vegetables, and fruits. They will also take advantage of unsecured garbage and pet food left outdoors. As scavengers, they provide an ecological service by helping to keep our communities clean of carrion. In suburbia, coyotes have been known to take smaller pets if left unprotected. Animal guardians are advised to keep cats indoors, and dogs under control during the day and indoors at night.

HABITS

In rural habitats, covotes hunt by day and night. In urban areas, coyotes appear to be more nocturnal but can often be seen during daylight hours, especially at dawn and dusk. They communicate by vocalizing, scent marking and through a variety of body displays. It is common to hear them howling and yipping at night, or even during the day in response to sirens and other loud noises. Indeed, the coyote's scientific name is Canis latrans which means "barking dog." With approximately a dozen different vocalizations, it is common to mistake a few covotes communicating with each other for a large group. Coyotes are fast and agile; they can run at speeds of 25-40 mph (65 km/h) and jump 6 feet. Coyotes are also highly intelligent and social animals; they learn quickly and are devoted parents.

KEEPING DOMESTIC ANIMALS SAFE

Although free roaming pets are more likely to be killed by automobiles than by wild animals, coyotes may view cats as potential prey and dogs as competition. Other domestic animals including sheep, chickens and rabbits may also be seen as food and must be protected. Consider the following:

- Don't let domestic animals roam; keep them securely enclosed and protected at night.
- Fence your property. The fence must be at least 6 feet tall with the bottom extending at least 6 inches below the ground. Fences are more effective by using wire mesh, outwardly inverting the top of the fence, by using electric fencing along the top and bottom (more strands for protecting livestock), or by installing the CoyoteRoller™ which makes it difficult for predators to gain the "foothold" they need to pull up and over the top of an enclosure (see: www.coyoteroller.com).
- Llamas, donkeys, and livestock guard dogs are effective in reducing coyote-livestock conflicts.
- Don't leave animal foods outside: keep all food well secured.
- Install motion-sensor lights near buildings.
- Walk dogs on leashes, particularly during coyote mating and pupping seasons (see chart).
- Spay or neuter your dogs. Though uncommon, coyotes are attracted to, and can mate with, dogs.

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