

City of Garden Grove

Coyote Management Plan



City of Garden Grove
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Executive Summary

In response to the rise of more aggressive coyote activity in neighborhoods, City staff researched responses from surrounding communities, reviewed existing Coyote Management Plans, and researched coyote ecology to better understand and to create an appropriate plan for Garden Grove. This Plan enables the City to manage the amplified presence of coyotes with an emphasis on education, hazing, and lastly consider employing lethal means of removal only when the safety of the public is at risk.

The intent of this plan is to have a document that can be used to help inform the public and to provide guidance for residents and City staff in dealing with coyotes in Garden Grove. Guidelines and provisions of this plan do not supersede federal, state and county regulations and policies. Furthermore, the provisions of this plan do not apply to Garden Grove residents, businesses or homeowner associations in pursuit of their legal rights in dealing with coyotes.

Coyotes and the Law

According to State laws, coyotes are considered “non-game wildlife;” therefore any resident or homeowner association Board of Directors can initiate, at their own expense, action to protect themselves and their property from coyote attacks. However, Proposition 4, passed by California voters in 1998, prohibits leg-hold traps statewide and severely restricts use of other body gripping traps. **NO PRIVATE INDIVIDUAL IS AUTHORIZED TO DISCHARGE A FIREARM WITHIN THE CITY OF GARDEN GROVE.**

If a resident is concerned with coyotes in their area, the City recommends following the guidelines in this plan and other handout material in decreasing attractants and increasing pet safety in order to help shape coyote behavior to avoid human contact. A resident may contact the City’s Animal Care Division at (714) 741-5565 if they have any questions or wish to report an aggressive coyote. Residents may report coyote sightings to the City's coyote hotline number at (714) 741-5286. Please indicate the date, time, and location of sightings.

Management Strategy

City strategy for managing coyotes is based on balancing respect and protection for wildlife and their habitats without compromising public safety. The main strategy is comprised of a three-pronged approach consisting of:

- Public education designed to raise awareness of the presence and dangers of coyotes and the reality of continued co-existence with coyotes.
- Enforcement of laws and regulations prohibiting the feeding of wildlife.
- Ensuring public safety by implementing appropriate tiered responses to coyotes and their interactions with human and their pets. This plan requires active participation on the part of the entire community including residents, homeowners associations, volunteers and City personnel.

Education

Education is the key to having residents make appropriate decisions regarding their safety or managing their property and pets. Education will involve city staff and or volunteer groups visiting properties to talk with residents and the distribution of written materials and handouts that will also be available at City facilities. The goal of education is to decrease attractants, increase pet safety, and provide tips for safe situational hazing and creating reasonable expectations of normal coyote behavior.

It should be noted that there is new research being performed by the National Parks Service in Los Angeles that is identifying that not all coyotes are traveling from open spaces into urban areas. Instead, they are discovering that the urban coyotes may always live within the urban setting and adjust their behavior around the urban activities, which underscores the need for and benefits of creating and implementing this plan.

Enforcement

The act of feeding wildlife is known to lead to an increase in wildlife activity. Feeding can attract coyotes and their prey to an area leading to an increased likelihood of creating a habituated coyote(s) resulting in increases in coyote and human interactions. The Garden Grove Municipal Code prohibits feeding feral animals and wildlife. City of Garden Grove Animal Care Officers will strictly enforce the Garden Grove Municipal Code, pertaining to this activity.

Response Plan

A detailed tiered response plan has been developed to provide a mechanism for identifying and classifying different levels of human and coyote interactions. Definitions of coyote encounters are listed in Appendix A, and Appendix B provides a chart detailing coyote behavior, behavior classification and recommended responses.

Coyote Management Plan**Goals**

The goal of this Management Plan is to provide practical advice and response protocol to minimize conflicts between humans, their pets and urban coyotes using education, behavior modification and development of a tiered response to aggressive coyote behavior. The tiered response requires active participation on the part of the entire community including residents, homeowners associations, volunteers and city personnel.

This Management Plan is based on research and best-known management practices and includes a full spectrum of management tools. Basic principles that guide this plan are based on the following:

1. Human safety is a priority in managing wildlife/human conflicts that pose a danger to people.
2. Urban wildlife is valued for biological diversity, as members of natural ecosystems, and reminders of larger global conservation issues.
3. Urban wildlife and wildlife habitats are important to Garden Grove residents. Although urban environments are more favorable to some species than others, coexistence is the foundation of the city's general wildlife management programs.
4. Preventive practices such as, reduction and removal of wildlife attractants, habitat manipulation (e.g. removal of potential coyote denning areas), and responding appropriately during human and wildlife interactions, are key to minimizing potential human conflicts.
5. Garden Grove management techniques and decisions are based on a thorough understanding of the biology and ecology of urban wildlife species.
6. Education and communication are essential in minimizing aggressive behavior and potential attacks and in supporting human and animal needs and coexistence.
7. Emphasis of this management plan is placed on preventative measures, nonlethal controls, and using lethal controls only when necessary and, when necessary, in the most humane manner possible.

Background

The City of Garden Grove does not own or have any control of wild animals found within its boundaries, nor is the City responsible for the actions or damage caused by them. These animals are common, and full eradication of coyotes in the urban environment is not practical.

The Garden Grove Animal Care Service Officers do not respond to calls for service for normal coyote behavior, such as sightings. However, they will respond to calls which involve a sick, injured, or deceased coyote(s) and when aggressive behavior is occurring.

Difficulties Managing Wildlife

Although Garden Grove acknowledges the value of its wildlife, some individual animals adapted to urban environments have the potential to cause problems and/or conflicts in specific situations. In addressing problems, the City promotes policies of education and supports prevention and implementation of remedial measures that do not harm the wildlife or their habitats, unless warranted.

A wildlife problem is defined as any situation that causes a health or safety issue to its residents. In cases where problems with wildlife are associated with human behavior (leaving garbage exposed or intentional wildlife feeding), ordinances and enforcement may be enacted to minimize conflict.

In some cases, particular or traditional management tools are ineffective. For example, relocation of animals is not ecologically sound and is not allowed in California without permission from the California Department of Fish and Wildlife (CDFW). Generally, relocated animals do not survive the transfer. If they do, they rarely stay in the relocation area and tend to disperse to other locations where they may cause problems to humans, be involved in territorial disputes or introduce disease. In some instances, the translocated coyote will go to great lengths to return to its previous territory. For these reasons, the CDFW does not relocate coyotes.

As a last resort, lethal control measures, when employed, must be selective, meaning they target the alpha coyote or problem coyote. If they are used, they must be humane and in compliance with federal and state laws.

It is not economically, ecologically or in other ways justified to attempt to remove all coyotes from the urban ecosystem as a means of addressing conflicts between humans, their domestic pets, and coyotes. Attempts made by local, state and federal agencies as well as private organizations over the past century to eradicate coyotes have proven to be ineffective. Moreover, during the past century coyotes have expanded their territories to include every state, except Hawaii.

The Coyote (*Canis latrans*)

Where are coyotes from?

Coyotes are originally native to California and several other western states. Due to their intelligence, adaptability, the decline of larger animals and urban sprawl, coyotes have successfully expanded their range. They are now found in all states, except Hawaii, and have successfully established themselves in every urban ecosystem across North America.

What do coyotes look like?

On the upper parts of their body, coyote pelts vary from gray-brown to yellow-gray. Their backs have tawny-colored under fur and long overcoats with black-tipped guard hairs. The latter forms a dorsal stripe and dark band over their shoulders. Throat and bellies tend to be buff or white. Forelegs, sides of the head, muzzle and feet are reddish brown. Coyotes have long legs, small paws, large pointed ears and a pointed snout. Weighing between 15 to 40 pounds, their long legs and thick fur make them appear larger.



How and where do coyotes live?

Coyotes may live alone, in pairs, or in family groups with one breeding pair, generally mating once a year, usually January through February. Social organization and group size are highly correlated with food availability. The rest of the group is comprised of multiple generations of offspring. Pups are born March through May. The entire group protects the pups though pup mortality averages between 50 and 70% in the first year. Litter size depends on available resources and the number of coyotes in the area.

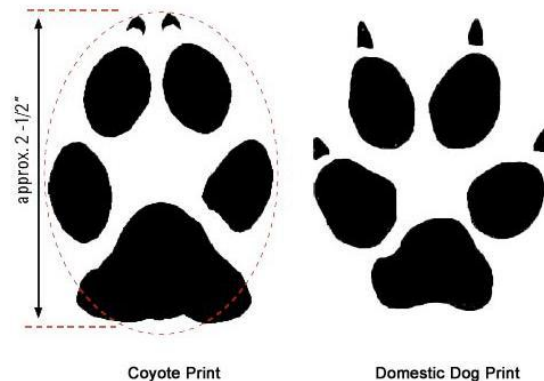
Although a litter varies from two to 12 pups, the average is six or seven. Pups remain in the den the first six weeks and then travel with the adults. By the end of summer; they are more independent, yet, may still travel with parents and siblings.

Because coyotes are socially organized, the group raises the young and defends their territory from other coyotes. Territories do not overlap. Although they generally live in groups, coyotes often travel alone or in pairs.

In the urban areas, most coyotes live in large parks, golf courses, greenways and natural open space where they find food and cover. Thus, their territory may follow the park or open space boundaries. They are extremely adaptable in creating territories under a wide range of urban conditions.

How do you know where coyotes are?

If you do not directly see a coyote, you may notice paw prints or scat (feces) left behind or even may hear them. Their prints are similar to dogs and difficult to tell apart. However, unlike dogs, their scat is rope-like and typically filled with hair, seeds and bones. Coyotes use scat to communicate and often deposit it in the middle of a trail or edge of their territory where it is easily seen. Coyotes howl, bark or whine – usually to communicate with each other.



What Role do Coyotes play in the Environment?

Coyotes play an important role in the urban ecosystem, particularly as a top-predator. They eat a broad range of small animals, including squirrels, mice, rabbits, rats and gophers. Rodents make up a majority of their diet. In the process, they control the population sizes of these animals, many of which are considered pests to humans. The coyotes also prey on “mesopredators,” such as raccoons and opossums and are known to attack and prey on domestic pets. Without a top predator like the coyote to keep them in check, mesopredators can dramatically reduce bird populations by eating their eggs (Crooks and Soule, 1999). Additionally, a reduction in bird population increases the number of insects including those classified as disease vectors (Dickson et. al., 1979). Coyotes also disperse seeds of native plant species and recycle nutrients.

How do Humans Perceive Coyotes?

People respond to coyotes in various ways. Some observe them with enjoyment, others with indifference and some with fear or concern. Personal experiences with coyotes may influence their perceptions of them. Experiences range from animal sightings without incident to stalking, killing of pets or, at the extreme, an attack on a person. Coyote attacks on humans are very infrequent and, to date, there have not been any verified attacks in Garden Grove. Although such incidents generate significant media coverage, they remain a very rare event.

Because wild animals may understandably conjure up fear in some people, actual sightings and perceptions may become exaggerated or misconstrued (see Appendix A for coyote description encounters). The wide range in perceptions of urban coyotes from Garden Grove residents supports the need for strong and consistent educational messages to clarify management techniques as well as the need to be ready to take action when it proves necessary.

Have Coyote Numbers Increased in Garden Grove?

Currently, there are no historical records tracking urban coyotes in the city or county. Without tracking and updated inventories, it is difficult to know if the number of coyotes has increased in an area. What is known is that coyotes can become habituated to humans. This is especially the case if they are intentionally or unintentionally fed, which can lead to loss of fear of people and bolder behavior. Residents have reported an increased population over the past 24 months and generally more aggressive behavior and signs of human habitation.

In general, coyotes regularly roam an area of about two to five square miles to obtain enough food for the pack members. Normally, each pack is a territorial family group made up of three to ten individuals. A portion of the area the pack inhabits is the pack's territory, which they will defend from other coyotes. The number of mature coyotes in the pack is often related to the amount of food resources in the territory. Coyotes, like all predators, will stabilize their populations without human interference.

Coyotes are opportunistic, versatile carnivores that primarily eat small mammals, such as rabbits, ground squirrels, and mice, to name a few. Coyotes tend to prefer fresh meat, but will eat significant amounts of fruits and vegetables during the autumn and winter months when their prey is scarce. Part of the coyote's success as a species is its dietary adaptability. This dietary flexibility, coupled with a lack of prey and closer proximity to residents, has led the coyotes to seek alternative food sources, including small pets, pet food, and fallen fruits and vegetables found in the backyards of homes. Generally, coyotes are reclusive animals who avoid human contact. As coyotes have become urbanized, however, they have realized there are few real threats in suburban environments. This has resulted in coyotes approaching people and even feeling safe visiting yards when people are present.

A coyote pack usually has only one breeding (or alpha) female. This female often produces more pups than can be supported by the pack. Young coyotes may leave the pack at about nine to eleven months of age, but dispersal patterns are highly variable. These juvenile coyotes become transients. Other types of transients include older individuals that cannot defend their role as an upper level pack member and are forced out of the pack.

Transients move all over in narrow undefended zones that exist between pack territories searching for an open habitat to occupy or a group to join. Some die before they succeed (many are hit by cars). It is generally understood that the constant influx of transients to an area defeats coyote eradication programs.

Removing a group of territorial coyotes will create an undefended area into which the transient coyotes will flow. At all times of the year, numbers of transients are immediately available to replenish any voids created by killing the resident coyotes. Furthermore, if either the alpha male or alpha female in a pack is killed, ovulation in other breeding-age females is often triggered and a corresponding increase in the number of litters and/or number of pups per litter is observed.

Monitoring and Collecting Data

Monitoring and data collection are critical components of an effective coyote management plan. Effective monitoring relies on the efforts of the community to report the location and types of coyote activity. The collection and compilation of local data allows staff to estimate and monitor resident population size, determine established family group territories, and track areas with increased coyote activity. This is best accomplished with input from both residents and city staff. **Coyote sightings or incidents can be reported by using the Garden Grove City App or by calling the City's coyote reporting hotline at 714-741-5286. IF YOU ARE IN DANGER CALL 911. When reporting, it would be most effective if the reporting party can provide locations or areas of increased activity, the number of coyotes observed, and the type of incident.**

The purpose of monitoring human-coyote interactions is to document where coyotes are frequently seen and to identify human-coyote conflict hotspots, if they exist. Gathering specific data on incidents will allow for targeting of educational campaigns and conflict mitigation efforts, as well as the ability to measure success in reducing conflicts over time.

Garden Grove is part of the Coyote Catcher website (<https://ucanr.edu/sites/CoyoteCatcher/>) that interfaces with the statewide reporting and reporting from other agencies. This helps monitor movements, potential hot spots, areas becoming habituated and/or dangerous and allows staff to accurately respond to reports from our community. Public may report coyote interactions on the website.

Public Education and Outreach

Education is the key to having residents make appropriate decisions regarding their safety or managing their property and pets. This involves decreasing attractants, increasing pet safety and creating reasonable expectations of normal coyote behavior.

Learning how to respond to a coyote encounter empowers residents and can help reduce undesired coyote behaviors. The public should understand what normal coyote behavior is when living in close proximity with coyotes. For example, vocalization is normal acceptable behavior and does not indicate aggression. Education and outreach efforts by the city should focus on:

- Understanding human safety, pet safety, coyote attractants, deterrents to coyotes on private property, including appropriate fencing, exclusion techniques, "what to do" tips, and information on appropriate hazing techniques.
- Developing a common language and awareness of normal versus abnormal behavior when discussing encounters with coyotes (see definitions in Appendix A)
- Disseminating information to residents, businesses and schools through the City's website, the GGTV3 Channel, water bill inserts, social media, traditional media, fliers/handouts, mailers, etc.
- Consulting with land managers whose properties are known sources of coyote dens, utility companies, non-profit organizations like the Humane Society of the United States and agencies like the California Department of Fish and Wildlife that provide public education materials, programs and expertise.

How Humans affect Coyote Behavior, Coyote Attractants in Urban Areas

Coyotes are drawn to urban and suburban areas for the following reasons:

- 1. Food.** Urban areas often support large numbers of rodents, including 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. To reduce food attractants in urban and suburban areas:
 - Never hand-feed or otherwise deliberately feed a coyote.
 - Avoid feeding pets outside. Remove sources of pet food and water that a coyote could easily obtain. If feeding pets outside is necessary, remove the bowl and any leftover food promptly.
 - Never include meat or dairy in compost.
 - Maintain good housekeeping, such as regularly raking areas around bird feeders.
 - 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, trashcans are more likely to be tipped over and explored.
 - Bag especially attractive food wastes, such as meat scraps or leftover pet food, before discarding
- 2. 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.
 - During drought or otherwise dry conditions, water can be as alluring as food, so remove water bowls set outside for pets and make watering cans unavailable.
- 3. 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.
- 4. Unattended Pets.** Pets are a normal part of an urban landscape. Within their territory, coyotes will at times consider pets as potential prey or potential competitors.
 - Free-roaming pets, especially cats and sometimes-small dogs, may attract coyotes into neighborhoods. The best way to minimize risk to pets is to not leave them outside unattended.

Garden Grove encourages citizens concerned with the safety of their pets that need to be outside to utilize “coyote proof” enclosures (aka – pet condos) to protect their pet while allowing the pet to be outside.

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 best way to protect cats from coyotes (and the other dangers of outside life, such as cars, disease, dogs and other wildlife) is to keep cats primarily indoors and 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 can be attracted to the outdoor pet food. Although there is no sure way to protect feral cats from coyotes, the following tips can be helpful:

- ✓ Avoid feeding feral cats out in the open. Doing so makes it easier for coyotes to hunt and find them and can have other unintentional consequences, including ecological damage.
- ✓ Provide various means of escape (plant/provide trees & do not declaw outdoor cats).
- ✓ Haze coyotes seen on the property (see Appendix C). Making them feel uncomfortable will encourage them to stay out of the area.

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

- ✓ Coyotes may see small, unattended dogs as potential prey. It is important, therefore, to either keep dogs on a six-foot long or shorter leash when outdoors or to stay within six feet of them when on your property. (Coyotes may view a dog on a leash longer than six feet as an unattended pet.) This is especially important if you are in or near nature preserves or open-space areas.
- ✓ 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 February. During this time, it is especially important not to let dogs outside unattended unless in a “coyote proof” enclosure and to keep them on leashes (six feet long or less) when in public areas.
- ✓ Do not allow dogs off leash, when off your property. It is against the law and unsafe for your dog.
- ✓ When walking your pet bring a noise maker or walking stick to help with defensive tactics.

Other domestic animals kept outside, such as rabbits, may also be viewed as prey by coyotes. Protect outdoor animals from coyotes (and other predators) with protective fencing and/or confine them in sturdy cages each evening.

Residents are encouraged to use the Yard Audit Checklist (Appendix D) as a tool to help recognize and remove attractants in their yards and neighborhoods.

While human attacks are very rare, urban landscape development, habituation through intentional and unintentional feeding, pet related incidents and media attention have led some urban residents to fear coyotes. This is understandable. Coyotes are wild animals that pose dangers that need to be recognized and appropriate precautions taken. Steps must be taken to address safety concerns, misconceptions, and appropriate responses to potential threats to human safety. It is important to keep in mind that coyotes have been in and around Garden Grove (and other parts of Southern California) for a very long time.

Hazing and Behavioral Change

Some coyotes have become too comfortable in the close proximity of people. For coyotes to safely coexist with people, they need to fear and avoid contact with humans.

Hazing—also known as “fear conditioning”—is the process that facilitates this change in coyote behavior and is by necessity a community response to negative encounters with coyotes. The more often an individual animal is hazed, the more effective hazing is in changing coyote behavior (see Appendix C for coyote hazing overview).

Goals of Hazing

The goals of hazing are to:

1. Reshape coyote behavior to avoid human contact in an urban setting and to minimize attacks on pets.
2. Give residents tools to actively engage in reshaping coyote behavior and to support feeling safe in their parks and neighborhoods.
3. Model appropriate and effective hazing behavior and share accurate information about coyotes with other residents, friends and family.

Hazing Process

Human behavior can shape animal behavior, in either a negative or a positive manner. People living in close proximity to coyotes can remove coyote attractants, identify potentially dangerous situations for their pets and themselves, and respond in a manner designed to change coyote behavior.

Overview of Hazing

Hazing is a process whereby a person or a number of individuals encountering a coyote respond in like manner to make a coyote afraid and choose to leave a situation where their presence is unwanted.

Basic hazing consists of standing your ground, never ignoring or turning your back to a coyote(s), and yelling and/or making unpleasant and frightening noises until the animal(s) choose to leave. If the coyote does not leave, use tactics that are more aggressive.

More aggressive hazing consists of approaching an animal more quickly and aggressively, throwing projectiles like stones near the animal, spraying with a hose or water gun, or creating a more heightened fear of contact so the animal flees. For more options, see Appendix C on hazing.

Hazing must continue once it begins until the animal leaves. Otherwise, the coyote will learn to “wait” until the person gives up. Not following through with hazing will create an animal more resistant to hazing instead of reinforcing the image that “people are scary.”

Hazing never involves putting yourself in danger or injury to the animal, only the threat of injury. An injured animal becomes less predictable than a normal, healthy one.

A common concern with hazing involves potential danger to the hazer. A coyote’s basic nature is very skittish and this nature is what makes the technique useful. A normal, healthy coyote is very unlikely to escalate a situation with a person who is aggressively hazing. It is important that the hazer provide the coyote a clear escape route to flee and not corner the animal. A cornered animal may decide that attacking the hazer is the only option.

Garden Grove recommends safe and situational hazing only. Elements of effective hazing include:

1. Pet owners need to protect pets. Off-leash and unattended dogs and unattended outside cats attract coyotes (as does pet food).
2. Residents need to learn hazing effectiveness and techniques. Hazing needs to be active for a sustained period to achieve the desired change in behavior.
3. Hazing requires monitoring by the resident to assess its effectiveness and to determine if further action or more aggressive hazing is needed.
4. A decrease in coyote activity in an area where hazing has been conducted may indicate its level of effectiveness.

Enforcement

The act of feeding wildlife is known to lead to an increase in wildlife activity. Feeding can attract coyotes and their prey to an area leading to an increased likelihood of creating a habituated coyote(s) resulting in increases in coyote and human interactions. California law prohibits feeding wildlife. Garden Grove Animal Care Officers will strictly enforce the Garden Grove Municipal Code, pertaining to this activity.

CALIFORNIA CODE OF REGULATIONS TITLE 14

§251.1. Harassment of Animals

Except as otherwise authorized in these regulations or in the Fish & Game Code, no person shall harass, herd or drive any game or nongame bird or mammal or furbearing mammal. For the purposes of this section, harass is defined as an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering.

Response Plan to an Incident

Incident Defined

An incident is described as a conflict between a human and a coyote where the coyote exhibits the following behavior: coyote approaches a human and growls, bares teeth, or lunges; injures or kills an escorted/on-leash pet. This includes attended pet loss, but not human injury. When human injury occurs, it is defined as an “attack” (see Appendix A-definitions).

The City of Garden Grove and/or California Department of Fish and Wildlife (CDFW) will investigate an incident if a human is physically injured. If a pet is injured or killed, Garden Grove Animal Care will follow our plan based on information (See Appendix B on levels of coyote behavior). If a resident ever feels threatened by any wild animal, they should call 911 immediately.

Circumstances Determine the Response

Circumstances of the incident are critical in determining response. If an attack occurs unprovoked, indicating a continuous threat to human safety, the City will coordinate an investigation with the CDFW. Based on this consultation and its own independent professional judgment, the City will determine a course of action, potentially including permitting the lethal removal of the animal involved. Garden Grove will not engage in any attempts of general culling. Only specific animals will be targeted.

The City of Garden Grove will target education to the region affected on how the incident occurred and how to avoid it in the future. The residents will be instructed on safety tips and response techniques and on how to remove all coyote attractants.

In a provoked attack, the City and the County will determine if circumstances indicate a continued threat to human safety. The City will determine the initial response that may range from targeted education up to lethal removal of the involved animal(s). After the 24-hour initial response, staff will consider follow-up actions and implement them as required.

Continued response will depend on specific details of the attack. The level of threat to human safety will determine if continued action is needed. Continued activity may include increased educational materials such as flyers, mailers or press releases, public meetings, and/or potentially applying for a permit for lethal removal of the animal involved.

The information and recommendations contained in this Coyote Management Plan are provided as educational and informational resources and are not guaranteed to be effective. The City of Garden Grove is not responsible for and shall not be held liable for any damage or injuries resulting from the use of information, techniques, recommendations, or suggestions contained herein.

If trapping is necessary, Garden Grove will use a contracted trapper. If there is immediate danger that requires immediate lethal removal, Garden Grove will support and coordinate with the trapper as well. CDFW may or may not be included. In the event of an extreme safety situation, Garden Grove Police are also potential first responders. **NO PRIVATE INDIVIDUAL WILL BE AUTHORIZED TO DISCHARGE A FIREARM WITHIN THE CITY OF GARDEN GROVE.**

Response Plan

A detailed tiered response plan has been developed to provide a mechanism for identifying and classifying different levels of coyote interactions with human and their pets, either attended or unattended. Definitions of coyote encounters are listed in Appendix A, and Appendix B provides a chart detailing coyote behavior, behavior classification and recommended responses.

As noted below, lethal removal may be warranted in specific situations. The City will consider measures aimed at population control if the coyote population reached a level where there is a threat to public health, safety and welfare.

Threat Level Tiered Response

Level Green *Behavior:* A coyote is seen or heard in an area. Sighting may be during the day or night. Coyote may be seen moving through the area.

Response: Education on presence of coyotes and safety tips.

Level Yellow *Behavior:* A coyote appears to frequently associate with humans or human-related food sources, and exhibits little wariness of human presence. Coyote is seen during the day resting or continuously moving through an area frequented by people or entering a yard with or without pets.

Response: Education and aggressive hazing when coyotes are encountered and enhanced efforts to raise public awareness of incident(s) and circumstances. If multiple level yellow incidents have occurred in the same vicinity within a short amount of time, lethal removal **may** be recommended.

Level Red: *Behavior:* A coyote is involved in an incident(s) where there is an attended domestic animal loss. Several incidents in the same general area may indicate the presence of a habituated coyote(s). A coyote that has been involved in an investigated and documented provoked or unprovoked close encounter or attack on **humans and/or their pets**.

Response: City staff may work to lethally remove the responsible coyote(s) after evaluating all available information including the details of the incident(s). If a coyote has attacked or bitten a human, California Department of Fish and Wildlife will investigate, locate the offending animal, and remove it.

Appendix A - Definitions of Encounters with Coyotes

Active Coexistence: Humans and coyotes exist together. Humans take an active role in keeping coyotes wild by learning about coyote ecology and behavior, removing attractants, taking responsibility for pet safety, and hazing coyotes when they are encountered in neighborhood or community spaces (except for predetermined coyote-appropriate areas). Hazing is not appropriate in a designated nature reserve or similar open space, unless the coyote exhibits threatening behavior to persons or leashed pets.

Attack: A human is injured or killed by a coyote.

Provoked - A human-provoked attack or incident where the human involved encourages the coyote to engage. Examples include when a human intentionally corners, injures, tries to injure, attempts to capture or feeds the coyote.

Unprovoked - An unprovoked attack or incident where the human involved does not encourage the coyote to engage.

Domestic animal loss or injury: A coyote injures or kills a pet. Also includes “depredation”—predation on domestic pets.

Encounter: An unexpected, direct meeting between a human and a coyote that is without incident.

Feeding

Intentional feeding - When a person or persons actively and intentionally feeds coyotes or provides food for animals in the coyote food chain, including feral cats.

Unintentional feeding - When a person or persons are unintentionally providing access to food. Some examples are accessible compost, fallen fruit from trees, open sheds and doors, pet food left outdoors, and bird feeders. Bird feeders indirectly provide food for coyotes, e.g. birds, bird food, rodents, and squirrels. Bird feeders must be kept high enough from the ground so a coyote is unable to reach the feeding animals. The area under the bird feeder must be kept clean and free of residual bird food.

Hazing: A training method that employs immediate use of deterrents to move an animal out of an area or discourage an undesirable behavior or activity. Hazing techniques include loud noises, spraying water, bright lights, throwing objects near but not at the animal and shouting. Hazing can help maintain a coyote’s fear of humans and deter coyotes from entering neighborhood spaces, such as backyards and play spaces. Hazing does not and should not injure animals or humans or damage property.

Observation: The act of noticing or taking note of tracks, scat or vocalizations.

Pet Attack/attended animal loss or injury: When a person is within 6' of the pet and the pet is on leash and is attacked and injured or killed by a coyote.

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

Suspected Pet Attack: A coyote is an opportunistic feeder and may feed on recently dead or dying animals, especially cats that were hit or killed by cars or other means. When eaten remains are found it suggests that, a coyote attacked the animal. In cases where Animal Care Officers respond to these calls, without knowledge of an actual attack, the incident will be recorded as a suspected attack.

Stalking Incident: A conflict between a human and a coyote where the coyote follows a person with or without an attended pet on leash. A human is not injured

Unsecured Trash: Trash that is accessible to wildlife, e.g. individual garbage cans, uncovered or open dumpsters or bags, or trash cans over flowing or where scattered trash is outside the receptacle.

Appendix B-Coyote Behavior, Behavior Classification, and Recommended Response

Coyote Action	Classification	Response
Coyote Heard	Observation Level Green	Ask for educational materials and info. Report To Garden Grove Animal Care Services.
Coyote seen moving in area	Sighting Level Green	Ask for educational materials and info. Report To Garden Grove Animal Care Services.
Coyote seen resting in area	Sighting Level Green	Educate on situational hazing techniques. Report To Garden Grove Animal Care Services.
Coyote seen resting in area with people present	Sighting Level Yellow	If area frequented by people, educate on normal behavior and haze to encourage animal to leave. Look for and eliminate attractants. Report To Garden Grove Animal Care Services.
Coyote entering a yard without pets	Sighting Level Yellow	Educate on coyote attractants, yard audit, provide hazing info. Report To Garden Grove Animal Care Services.
Coyote entering a yard with pets	Encounter Level Yellow	Educate on coyote attractants, yard audit, hazing info, pet safety. Report To Garden Grove Animal Care Services
Coyote entering yard and injuring or killing pet w/o people present	Pet Attack Level Red	Lethal removal considered if there is no response from the coyote to aggressive hazing, and there is evidence of recurrence. Report To Garden Grove Animal Care Services
Coyote biting or injuring unattended pet/pet on leash longer than 6'	Pet Attack Level Red	Lethal removal considered if there is no response from the coyote to aggressive hazing, and there is evidence of recurrence. Report To Garden Grove Animal Care Services
Coyote following or approaching a person w/o pet (Stalking)	Encounter Level Red	Lethal removal considered if there is no response from the coyote to aggressive hazing, and there is evidence of recurrence. Report To Garden Grove Animal Care Services, CALL 911 IF IN DANGER
Coyote following or approaching a person & pet (Stalking)	Encounter Level Red	Educate on hazing techniques and pet safety. Lethal removal considered if there is no response from the coyote to aggressive hazing, and there is evidence of recurrence. Report To Garden Grove Animal Control, CALL 911 IF IN DANGER

Appendix B-Coyote Behavior, Behavior Classification, and Recommended Response

Coyote Action	Classification	Response
Coyote entering yard or home with people & pets, no injury occurring	Encounter Level Red	Educate on coyote attractants, yard/neighborhood audits, hazing, pet safety. Lethal removal considered depending on specific circumstances. Report To Garden Grove Animal Control. CALL 911 IF IN DANGER
Coyote biting or injuring attended pet / pet on leash 6' or less	Pet Attack Level Red	Educate on coyote attractants, yard/ neighborhood audits, hazing, pet safety. Lethal removal recommended. Report To Garden Grove Animal Control, CALL 911 IF IN DANGER
Coyote aggressive, showing teeth, back fur raised, lunging, nipping w/o contact	Threat Level Red	Educate on coyote attractants, yard/ neighborhood audits, aggressive hazing, pet safety. Lethal removal recommended. Report To Garden Grove Animal Control, CALL 911 IF IN DANGER
Coyote biting or injuring person	Attack Level Red	Identify and gather information on specific animal involved, report circumstances, educate on coyote attractants, yard/ neighborhood audits, hazing, and pet safety. Report To Garden Grove Animal Control, CALL 911 IF IN DANGER . City staff will inform the California Department of Fish and Wildlife. Lethal removal recommended.

Appendix C – General Considerations

- 1.** Levels of hazing need to be appropriately relevant to coyote activity.
 - a)** Coyotes live in open spaces and, unless they exhibit aggressive behavior to human and/or their pets, the best practice is to leave them alone and educate the public on personal safety.
 - b)** Coyotes are often out late at night when few people are present. This is normal, acceptable behavior. Hazing may not be necessary.
 - c)** Exceptions: In early stages of hazing, programs should still engage the animal. Coyotes that associate danger in the presence of people under all circumstances will be reinforced to avoid contact.
- 2.** Hazing must be more exaggerated, aggressive and consistent when first beginning a program of hazing. As coyotes “learn” appropriate responses to hazing, it will take less effort from hazers. Early in the process, it is extremely common for coyotes not to respond to hazing techniques. Without a history of hazing, they do not have the relevant context to respond in the desired outcome (to leave).
- 3.** Techniques and tools can be used in the same manner for one or multiple animals. Usually, there is a dominant animal in a group who will respond—others will follow its lead. DO NOT ignore, turn your back or avoid hazing because there are multiple animals instead of a single individual.
- 4.** 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 in shaping that animal’s future behavior.
- 5.** Hazing must be directly associated with the person involved in the hazing actions. The coyote must be aware of where the potential threat is coming from and identify the person.
- 6.** Coyotes can and do recognize individual people and animals in their territories. They can learn to avoid or harass specific individuals in response to behavior of the person and/or pet.
- 7.** Coyotes can be routine in habit. Identifying their normal habits can help target which habits to change. For example, the coyote patrols the same bike path at the same time in the morning three to five days a week. Hazers should concentrate on that time and place to encourage the animal to adapt its routine to decrease contact with people.
- 8.** Certain levels of hazing must always be maintained so that future generations of coyotes do not learn or return to unacceptable habits related to habituation to people.
- 9.** Human behavior must change to support hazing and continued identification and, if necessary, remove possible attractants.
- 10.** Education about exclusion techniques including how to identify and remove attractants, personal responsibility in pet safety and having reasonable expectations are critical parts of a coyote hazing plan.
- 11.** Coyotes are skittish by nature. Habituated behavior is learned and reinforced by human behavior. Coyotes as a rule DO NOT act aggressively toward aggressive people. The one exception is a sick or injured animal. Engaging a sick or injured animal can result in unpredictable behavior. If this is suspected, people should not engage and should back away slowly from the animal until the animal is out of sight, and then immediately contact Garden Grove Animal Care Services at 714-741-5565.

12. Individuals involved in hazing need to be trained in explaining hazing to residents who witness the process. They also need to explain the difference between hazing and harassment of wildlife and goals of appropriate behavior for coexistence.

Public Hazing

Hazing requires by necessity community involvement, understanding and support. Residents are best equipped to respond consistently and at the most opportune times in their own neighborhoods, parks and open spaces not identified as nature reserves.

Summary of Hazing

Hazing is a process whereby the resident responds in a manner to make a coyote uncomfortable so it chooses to leave a situation where their presence is unwanted.

Basic hazing consists of standing your ground, never ignoring or turning your back to a coyote(s), yelling and making unpleasant and frightening noises until the animal(s) choose to leave.

More aggressive hazing consists of approaching an animal quickly and aggressively, throwing projectiles near the animal, spraying with a hose or water gun containing water or white vinegar, or creating fear of contact so the animal leaves the situation. Note: Many projectiles are not legal, including but not limited to slingshots, paintballs, guns and pepper balls.

Hazing must continue once it begins until the animal leaves. Otherwise, the coyote will learn to “wait” until the person gives up. The coyote will become more resistant to hazing instead of reinforcing the image that “people are scary”.

Hazing should never injure the animal. An injured animal becomes less predictable versus a normal, healthy one who responds in a consistent and predictable manner to hazing.

Hazing should be conducted in a manner that allows the coyote to return to its normal habitat in a direction that would minimize harm to the animal. Hazing the animal in the direction of other houses and busy streets should be avoided.

Hazing uses a variety of different hazing tools. This is critical as coyotes get used to individual items and sounds.

1. Noisemaker: voice, whistles, air horns, bells, “shaker” cans, pots, pie pans
2. Projectiles: sticks, small rocks, cans, tennis balls, rubber balls.
3. Deterrents: hoses, spray bottles with vinegar, pepper spray, bear repellent, walking sticks

Appendix D-Coyote Yard Audit Checklist			
(For Municipal or Homeowner Use)			
	OK	ISSUE	Ways To Mitigate
Food			Never intentionally or unintentionally feed a Coyote
Water Sources			Never feed pets outdoors; store all pet food securely indoors
Bird Feeders			Remove water attractants (such as bird baths, pet water bowls and leaky irrigation)
Fallen Fruit			Clean up fallen fruit around trees
Compost			Do not include meat or dairy among compost contents unless fully enclosed
BBQ Grills			Clean up food around BBQ grills after each use
Trash			Secure all trash containers with locking lids and place curbside the morning of trash pick up. Periodically clean cans to reduce residual odors
Landscaping			Trim vegetation to reduce hiding places and potential denning sites
Structures/ Outbuildings			Restrict access under decks and sheds, around wood piles, or any other structure that can provide cover or denning sites for coyotes and/or their prey
Fencing* Must comply with Garden Grove Zoning and Municipal Codes (Consult with the City's Planning Dept. for pre-approval)			Enclose property with an 7 foot fence (consider optional roller-top or other deterring device at top) to deter coyotes. Ensure that there are no gaps and that the bottom of the fence extends underground six inches or is fitted with a mesh apron to deter coyotes from digging underneath* Must comply with Garden Grove Zoning and Municipal Codes (Consult with the City's Planning Dept. for pre-approval)
PETS			Never leave pets unattended outside
PETS			Never allow pets to "play" with coyotes
PETS			Fully enclose outdoor pet kennels
PETS			Walk pets on a leash no longer than 6 feet in length

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.

References

Crooks, K. R. and M. E. Soule. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. *Nature* 400, 563-566.

Dickson, J.G. et. al., eds. *The Role of Insectivorous Birds in Forest ecosystems*. Academic Press. New York. 1979. 381 pp