



Village of Lincolnshire

Coyotes in Lincolnshire

The following information was derived from the Urban Coyote Ecology and Management publication. This comprehensive ecological study took place in the Chicago metropolitan area, specifically in Cook County. It was authored by Professor Stanley Gehrt, of the School of Environment and Natural Resources at Ohio State University. The study began in 2000 and was completed in November 2006.

As part of this study 253 coyotes were captured and 175 coyotes were radio-collared making this the largest urban study of coyotes in the world.

Where do coyotes come from?

- Coyotes are native inhabitants of the plains and southwest desert. They have learned to adapt quickly to a variety of environments. A dramatic change occurred during the last decade of the 20th century. The number of nuisance coyotes removed annually from the Chicago metropolitan area increased from 20 animals per year in the early 1990's to 350 per year in the late 1990's.



What do coyotes look like?

- The coyote is a medium-sized member of the dog family, which includes wolves and foxes. It has pointed ears, a slender muzzle, and a drooping bushy tail. Coyotes are usually grayish-brown with reddish tinges behind the ears and around the face, but coloration can vary from silver-gray to black. The tail usually has a black tip.

Most adults weigh 25 to 35 pounds although their heavy coats often make them look significantly larger. One alpha-male captured in Lincolnshire in early 2007 weighed 44 pounds.

Do urban coyotes form packs?

- Coyotes typically have a highly organized social system. This consists of packs, or groups, of coyotes that defend territories from other coyotes and these territories do not overlap. Although coyotes live in family groups, they usually travel and hunt alone or in loose pairs. Additionally, the urban population also consists of solitary coyotes that have left packs or are looking to join groups or create their own territories.

How long do coyotes live?

- In captivity, coyotes can live 13 - 15 years, but in the wild, most die before they reach 3 years of age. Coyotes have a 60% chance of surviving the first year. By far, the most frequent cause of death for the urban coyote has been collisions with vehicles (50% -70% per year). Other causes of death include shootings, malnutrition and diseases such as sarcoptic mange. Few of the diseases documented were of major importance to humans or pets. There is a coyote strain of rabies, but it is restricted to southern Texas.

- If a person is bitten by a coyote that is acting aggressive, he/she should be treated for rabies as a precaution. Any time a person is bitten by a coyote, animal care and human health professionals should be contacted. Urban coyotes may serve as a reservoir for heartworm. Approximately one-third of the Chicago area coyotes were infected with this parasite.

When do coyotes have young?

- In most years, coyotes typically mate in February. Only the alpha pair mates in a pack, but subordinates may help raise young. In April, 62 - 65 days after mating, four to seven pups are born. Some litters can be larger depending on the availability of food.
- Six weeks after birth the pups begin to leave the den. By the end of summer the pups are spending some time away from the adults and attempt to hunt on their own.

What do urban coyotes eat?

- The most common food items consumed by coyotes are small rodents, equaling about 40% of the diet; fruit at 22%, deer at 20%, and rabbit at 18%. Many people believe that urban coyotes primarily eat garbage and pets. Although coyotes are predators they are also opportunists and shift their diets to take advantage of the most available prey.

Table 1. Frequency of Food Items in the Diets of Coyotes in Cook County, Illinois*

Diet Item	Occurrence
Small rodents	42%
White-tailed deer	22%
Fruit	23%
Eastern cottontail	18%
Bird species	13%
Raccoon	8%
Grass	6%
Invertebrates	4%
Human-associated	2%
Muskrat	1%
Domestic cat	1%
Unknown	1%

*Based on the contents of 1,429 scats collected during 2000 - 2002. Some scats contained multiple items; therefore, the percentages exceed 100%.

Table 1. of Urban Coyote Ecology and Management, The Cook County Illinois Coyote Project, Ohio State University Bulletin 929

What good are coyotes?

- Coyotes serve an important ecological function in urban areas. Rodents are the number one food source of the coyote. They will keep these populations in check. Deer are overabundant in our area. Coyotes will rarely take an adult deer, they are primarily predators of deer fawns. According to this report, coyotes killed 20% to 80% of the fawns in different populations.
- Canada geese have adapted to urban landscapes, much like deer, and at times become overabundant and a nuisance. The coyote will take eggs from the nest but do not take enough adult geese to reduce their population.

Domestic Cats

- This is perhaps one of the most controversial aspects of the urbanization of the coyote. Coyotes kill cats for food or to remove potential competition. Those members of the public who own cats or are otherwise interested in their well-being view this function of coyotes as strongly negative. However, a positive consequence of coyotes removing peri-domestic or feral cats is the trickle-down effect. Studies have shown an increase in songbirds as a result.

Conflicts between humans and coyotes

- Coyote conflicts can range from relatively benign sightings of the occasional animal without additional incidents, to pet killing, to the most extreme cases of coyotes attacking people. Coyotes differ from most other wildlife species in cities in that they can be considered a nuisance without any evidence of damage, but simply by being seen. Perhaps because of their role as a large predator, people are sensitive to the real or perceived threat to pets or children. Indeed, most complaints regarding coyotes are that they occur near people, regardless of whether any damage has occurred.
- More extreme are the cases where coyotes attack and sometimes kill pets. Usually dogs are attacked when they are not accompanied by people but in some rare cases, small dogs have been taken in the presence of an owner. Small dogs may be taken at any time of year, but attacks on larger dogs are usually associated with the mating or breeding season, when coyotes are most territorial. In some cases, small dogs have been taken while the dog was on a lead, or coyotes have jumped fences to attack a dog in a yard. Most metropolitan area in the Midwest and eastern United States have reported an apparent increase in the number of attacks on pets.

Are all coyotes a threat to people?

- The study found a tremendous number of coyotes living near people in this area, yet relatively few conflicts were reported. Only five of the 175 radio-collared coyotes were removed as nuisances. It remains to be seen if conflicts will remain relatively rare or if they become more common as coyotes adjust to living with humans. For perspective, it is worth considering that no documented case of a coyote biting a human has been reported in this study. Contrast that result with domestic dogs; Cook County recorded 3,023 bites in 2005.

What causes nuisance coyotes?

- Coyotes that became nuisances during this study typically became habituated through feeding by people. In other words, people were feeding wildlife and, either intentionally or unintentionally, fed coyotes. Once coyotes associated human buildings or yards with food, they increased daytime activities and thus were seen more easily by people.

Implications

- Coyotes are common throughout most of the Chicago region, and the radio-tracking data demonstrate that people and coyotes coexist on a daily basis, with people usually unaware of interactions.
- As a top predator, coyotes are performing an important role in the Chicago region. Increasing evidence indicates that coyotes assist with controlling deer and Canada goose populations.
- Most coyotes are feeding on typical prey items, such as rodents and rabbits, and generally avoid trash. However, wildlife feeding will eventually habituate some coyotes, leading to conflicts.
- Coyotes are exposed to a wide range of diseases; however, to date none of them pose a serious human health risk. In general, the coyote population appears to be relatively healthy.

- Effective control programs target nuisance coyotes, rather than targeting the general coyote population. Coyotes removed through control efforts or other causes are quickly replaced. Successful management programs also include public education and outside consulting.
- A major finding in this study is the extent to which coyotes and people are living together. People are often unknowingly in close contact with coyotes each day, but coyotes are watching and learning from us. We influence their behavior and it will be our actions that determine what the future holds for our new neighbors.

Management options

Human behavior - Management programs for urban coyotes should begin with public education and untangling facts from myths. People should become aware of coyote signs and understand the differences between true threats and coexistence. It is important to stress that our relationship with coyotes is directly affected by our behavior – coyotes react to us, and we can foster mutual respect or a lack of respect through cues we send to coyotes. Some people are enamored with coyotes. They like seeing them in their yards and attempt to entice them by baiting them, or they want to try to “tame” them. Intentional feedings such as this should be prohibited, otherwise other management solutions will be temporary at best. People should be discouraged from inadvertent feeding where coyotes are present. This includes leaving pet food outside at night and maintaining large bird feeders that attract multiple species of wildlife.

Removal - There are instances when coyote habituation is so severe that the coyotes can be considered an immediate threat to people, especially children and pets. This is when removal is often warranted. Lethal removal is accomplished through trapping/euthanasia or shooting. Coyotes are difficult to trap or shoot, and these actions should be undertaken by professionals, especially in urban areas. Removal efforts should observe state and municipal codes. Fortunately, because of habituation, nuisance coyotes are often easier to capture than non-habituated individuals.

Removal programs designed to target specific nuisance coyotes will be more successful than broad removal programs that have a goal of removing a complete population of coyotes. It is difficult to capture all coyotes residing in an area, and as coyotes are removed, they are replaced by solitary ones. Removal, especially lethal removal, is often controversial within communities. This is especially true when the perceived threat by coyotes is somewhat ambiguous to residents. Removal programs can also be expensive, either for residents or municipalities, and traps can occasionally capture pets. For these reasons as well as ethical ones, coyote removal is best employed only after education has been attempted or if there is an immediate and obvious threat to human safety.

What are some steps to avoid conflicts with coyotes?

Conflicts with coyotes can be avoided by taking simple precautions or by alerting behaviors to avoid confrontation.

1. **Do not feed the coyotes.** Intentional feedings, such as bait stations in yards or parks, should be avoided. However, many people unintentionally feed coyotes by leaving pet food or garbage out at night or having large bird feeders. Coyotes are usually not interested in bird food, but bird feeders often attract rodents, especially squirrels, which then attract coyotes. Although coyotes seem to have a natural inclination to avoid human-related food, this can change when prey populations are low, or if the coyotes are young and haven't learned to hunt effectively.

2. **Do not allow pets to run loose.** If coyotes live nearby, do not let pets run loose, especially domestic cats. When hiking in urban parks, keep dogs on leashes.

3. **Do not run from a coyote.** When you encounter a coyote, shout or throw something in its direction. People should be encouraged to act aggressively toward coyotes during encounters, to re-instill a fear of humans in coyotes. In many cases, this involves shouting, waving, or clapping hands, and looking as tall as possible. Residents in some communities will chase coyotes by banging pots and pans or throwing balls or rocks at them. However, this should be done within reason so as not to create conflicts that might not otherwise occur by injuring or cornering a coyote that simply wants to escape.

4. **Repellents or fencing may help.** Some repellents may work in keeping coyotes out of small areas, such as yards, although these have not been tested thoroughly for coyotes. Repellents may involve remotely activated lights or sound-making devices. Fencing may keep coyotes out of a yard.

5. **Report aggressive, fearless coyotes immediately.** When a coyote fails to exhibit fear of humans or acts aggressively by barking or growling in the yard or playground, the animal must be reported as soon as possible to the Lincolnshire Police Dispatch at 847-883-9900.