THE WILY COYOTE (March 2008)

Coyote adventures into urban environments have been hitting the news lately. A coyote wandered through an open door of a Chicago Quiznos and took up residence in a beverage cooler. Recent studies estimate that there may be as many as several hundred to two thousand coyotes living in the Chicago area. One coyote enjoyed a several day stay in Central Park, New York, NY, prior to being captured, while another one was caught in downtown Detroit. Sightings in the west in urban areas have been commonplace for a long time. Coyotes have become permanent residents in Los Angeles, Phoenix, and Las Vegas. Seeing coyotes trotting along the side of the road in broad daylight on the outskirts of Tucson is part of the daily scenery.

Closer to home, there have been numerous coyote sightings in the vicinity of the Home Depot in Oak Ridge. In addition, residents in certain areas of Oak Ridge have noted increased occurrences of coyotes and are taking steps to make it less desirable for them to frequent the areas around their homes. Closer to work, sightings in the vicinity of parking lots and buildings at Oak Ridge National Laboratory (ORNL) have been on the increase.



Coyote on the ORR (Photograph by Jeff Riggs)

Historically known as an animal of the wild-west, the adaptable coyote has expanded its range into eastern North America while other carnivore populations (e.g., wolves) have declined. The first coyote probably crossed the Mississippi River into Tennessee around 1965. On the Oak Ridge Reservation (ORR) the first reported sighting of a coyote was in 1978, and the first coyote road kill happened in 1984. That same year, a pair of coyotes were observed raising a litter of pups on the east end of the reservation.

In 1987 a pair of coyotes were trapped on the ORR and equipped with radio collars. They were radio-tracked for nine weeks during which time they ranged over an almost 4-square mile area. In 1990 ORNL researchers estimated that approximately 12 to 16 coyotes existed on the reservation. Although there have not been any quantitative studies conducted since then, their numbers would be expected to follow the general upward trend noted for the east Tennessee

coyote population. Using known population densities from studies in other areas of the country, it is estimated that the reservation could potentially support as many as 50 or more coyotes.

The average coyote in Tennessee weighs approximately 20-40 pounds. Eastern coyotes resemble German shepherds, which sometimes leads to confusion in identification. Coyotes can be distinguished from most dogs by their habit of carrying their bushy tails at or below horizontal when they run; dogs typically carry their tails in the air. The coyote has erect, pointed ears and a slender muzzle with a black nose. Its fur is long, coarse, heavy, and variable in color. Most are grizzled gray or brown to reddish gray with buff under-parts. A gray-black band of longer hair (typically five-inches long) runs down the mid-back and forms a shoulder saddle or mane. Their eyes are typically yellow or amber with round black pupils, and their eyesight is six times better than humans. As is true for most canines, the coyote has a very well-developed sense of smell that is more than 23 times more powerful than humans. This animal relies mainly on its sense of smell in hunting for food. The coyote is capable of running up to 30 mph for short distances. They are good swimmers, but poor climbers.

A typical group of coyotes consists of a breeding pair and their offspring. The family group is largest in the summer when the pups, parents, and non-breeding adults are together at their den. Coyotes den in a variety of places, including brush-covered slopes, steep banks, rock ledges, caves, thickets, and hollow logs. Dens of other animals (e.g., groundhogs, foxes) are frequently used. In urban areas dens may include storm drains; culverts; holes in vacant lots, parks, and golf courses; and under storage sheds or porches.

Coyotes breed during January through March and typically produce five to six pups 60 to 63 days later. The entire family unit, including the mother, father, and other non-breeding family members, helps raise the young by providing food. Young coyotes begin dispersing in October and may travel up to 100 miles from their birthplace. This tendency to disperse over long distances has allowed the coyote to so effectively expand its range.

Litters are typically larger when food is abundant or the population is low. Their tendency to produce more young when populations are low makes it very difficult to reduce coyote numbers. Scientists have determined that it would require removing nearly 70 percent of the population every year to maintain a sustained population reduction.

Coyotes are chiefly nocturnal, but may be active during the day. They communicate through a series of yips, barks, and howls. A common call of the coyote is two short barks followed by a long wavering yodel known as the howl.

Adult males have large territories (15-25 square miles) in which they roam; adult females occupy areas of six to ten square miles. The availability of food effects territory size. Contrary to popular belief, coyotes do not hunt in packs. They are, in fact, relatively solitary hunters; they may, however, hunt in groups when food is plentiful. They may also form packs to defend territories.

The coyote will eat almost anything, including rodents, rabbits, muskrats, groundhogs, squirrels, skunks, raccoons, songbirds, insects, watermelons, apples, and persimmons. They prefer fresh kills but will eat carrion. Recent studies have also shown that coyotes eat Canada goose eggs, goslings, and occasionally adults and, thus, may be successful in controlling geese populations in urban areas. The same studies have shown that coyotes may take as many as 70 to 80 percent of

the population of urban deer fawns. In urban areas their diet may also include garbage, pet food, cats, and small dogs.

Coyotes are susceptible to a variety of diseases including rabies, mange, distemper, parvo enteritis, hepatitis, and internal parasites. External parasites afflicting coyotes include lice, mites, fleas, and ticks. Coyotes are not currently a major reservoir for rabies in Tennessee.

In urban areas where coyotes live relatively free of harm, they may lose their fear of humans. Coyote attacks are, however, extremely rare in contrast to the 4.7 million dog bites recorded in the United States each year. A person is millions of times more likely to get attacked by the family dog than by a coyote. The vast majority of coyote attacks in the United States are the result of a coyote attacking a small dog or cat and the pet's owner trying to stop the attack by getting between the animals. Other attacks occur when coyotes become comfortable around humans, often as a result of people intentionally or unintentionally feeding them. This can sometimes cause an unnatural boldness in these animals as they become accustomed to seeing humans and to hearing the sights and sounds of the urban environment. The coyotes will many times lose their fear of humans in these situations and may actually come into garages and onto porches or decks where a regular food supply (e.g., pet food) may be available. All of this leads to more confrontations between humans and coyotes.

Medical attention should be sought immediately if bitten by a coyote. Similarly, pets should be brought to a veterinarian for evaluation if bitten. Rabies is the main concern for humans and pets; coyotes may also, however, carry distemper, which can be transmitted to pets.

In general, coyotes will maintain their wariness and fear of humans in areas where they are hunted and trapped. Thus, hunting and trapping help to control coyote populations in more rural areas. Control in urban areas is, however, typically limited to culling of problem animals, as is done with raccoons and skunks.

Following are some tips for discouraging coyotes from becoming a nuisance in urban and suburban areas:

- 1. Do not feed coyotes (or other wild animals). When coyotes begin associating humans with food, they lose there natural fear and may become dangerous.
- 2. Try to eliminate water sources. They attract rodents, birds, and snakes that the coyote feeds upon.
- 3. Position bird feeders to make them inaccessible to coyotes as a food source. Be aware that rodents and birds attracted by bird feeders will also attract coyotes looking for easy prey.
- 4. Limit disposal of edible garbage in compost piles or other outside areas. Coyotes are opportunistic and will be attracted to such food sources.
- 5. Secure trash containers, or use trash cans with lids that clamp down tight (e.g., use bungee cords to secure garbage cans). Keep containers inside a closed garage or shed between pickups.

- 6. Place trash cans out on pickup day. Putting them out the night before allows coyotes to scavenge under cover of darkness.
- 7. Do not leave barbeque grills outside and uncovered. Food smells from the grill will attract coyotes. All grills should be covered and put away as soon after use as possible.
- 8. Feed pets indoors whenever possible. Pet food left out quickly attracts coyotes and other wild animals to this easily available food source.
- 9. Clear brush and high weeds from around your property. These areas provide cover for coyote prey items (e.g., small mammals, birds). Coyotes will hunt these areas when cover is provided.
- 10. Install a fence around your yard to deter coyotes. The fence should be a minimum of 6-feet high and should extend into the ground a minimum of 6 inches to prevent coyotes from digging under it.
- 11. Do not leave small children alone outside in areas where coyotes have been seen.
- 12. Do not allow pets to run free, especially at night. Coyotes may prey upon small pets (e.g., rabbits, cats, small dogs) as they are similar to prey items encountered in the wild.
- 13. Discourage coyotes from frequenting your area whenever possible. Harassment, including rock throwing, shouting, and making loud noises, can be effective when they are seen. Caution should be taken, however, in close confrontations, especially when the coyote shows aggression toward either you or your pet.

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