Coyote

*Canis latrans*

The coyote is named from the Aztec word, coyotl, which means “barking dog,” and is a familiar figure as “the trickster” in many Native American stories. The coyote is native only in North America and, of all wild canine species, the coyote has the widest range in this country. This predator is arguably the hardiest and most adaptable species on this continent.

**Description**

Coyotes in North Carolina look similar to red wolves, but coyotes are smaller, have pointed and erect ears, and long slender snouts. The tail is long, bushy and black-tipped and is usually carried pointing down. Color is typically dark gray but can range from blonde, red, and even black. Size is also variable, but averages about 2’ tall at the shoulder and 4’ in length.

The Eastern subspecies of coyote is normally larger than its Western counterpart. This is attributed to crossbreeding with the grey wolf (*Canis lupus*) in the northeastern part of its range. Because of thick fur, weights of coyotes can easily be overestimated. Adults are about the size of a medium-sized dog and weigh between 20 and 45 pounds. Coyotes may be mistaken for dogs or red wolves, and the existence of both dog-coyote hybrids and red wolf-coyote hybrids, while uncommon, adds more confusion to the identification effort.

The coyote has five toes on its front feet and four toes on its hind feet. Its feet are smaller and narrower than an average dog with the same body size. A coyote uses its teeth for tearing rather than chewing and will swallow a torn piece of meat whole.

**History and Status**

Originally, the coyote inhabited the prairies and grasslands of the middle portion of North America. But as Europeans arrived and settled across North America, the subsequent landscape changes, coupled with elimination of wolves, allowed the coyote to expand its range toward the eastern United States.

Americans have devoted more efforts to control coyotes than any other North American species. But despite extensive control attempts (especially in Western states), coyotes have survived and expanded their range. Although they sometimes prey on livestock, coyotes are ecologically valuable in keeping prey species, such as rodents and groundhogs, in balance with their habitat.

**Habitat and Habits**

The coyote is classified as a carnivore, but it is an opportunistic feeder, meaning it will feed on a variety of food sources, depending on what is most readily available and easy to obtain.

---

**Range and Distribution**

At the time of European settlement, coyotes were found only in the Great Plains, but they have since expanded their range to include most areas in North America and parts of Central America. Until the 1980s, coyotes seen in North Carolina were due to illegal importation and release by individuals for sport hunting and other reasons. However, by the 1980s, coyotes started to appear in western North Carolina. These coyotes were the result of natural range expansion from Tennessee, Georgia and South Carolina. Coyotes are now established in all 100 counties of North Carolina.

A coyote’s home range varies from 2 miles to 25 miles, depending on factors such as season, continued next page

**Range Map**

Coyotes are found in all 100 counties.
Primary foods include fruit, berries, rodents, rabbits, birds, snakes, frogs, and insects. They will scavenge on animal remains, including road-kill, as well as garbage and pet food left outdoors. Like many wild animals, the coyote’s diet varies with seasonal changes. In summer, it eats berries and most types of small mammals: mice, rabbits, fawns, squirrels, birds, woodchucks, and insects.

In fall, the diet is much the same; however, a coyote living around farmland will eat corn, apples and watermelons, if they are abundant. The coyote’s diet in the winter consists mainly of mice and rabbits.

In the spring mating season, the diet shifts back to typical summer food. The pups’ diet consists of milk and regurgitated meat and they learn to hunt at eight or nine weeks of age. The family unit usually begins to disperse by late November or December. In many cases, one pup stays behind as a “helper” pup for the next year’s litter. Coyotes mate for life.

Coyotes survive anywhere there are abundant food sources. Their habitat can range from agricultural fields to forested regions and suburban neighborhoods. Coyotes, like other wildlife, are adapting to the urban-suburban environment and are opportunistic in finding food and resources available in these places.

Although the coyote usually digs its own den, it will sometimes enlarge an old animal hole or perhaps fix up a natural hole in a rocky ledge to suit its own needs. Dens are usually hidden from view and used by the coyote to birth its young and to sleep. The coyote does not hibernate.

**People Interactions**

Coyotes have played a role in the lives of Americans as far back as this country’s history is recorded. Native American stories depict coyotes as clever and tricky. For example, the *National Geographic* reports that coyotes scan the sky looking for ravens flying in circles, since this usually indicates a dead animal is located just below the birds.

Although some people find a coyote’s howl unnerving, this howl serves many purposes; coyotes howl to locate pack members, distract threats away from their den, or to mark their territory. In the late summer, pups become very vocal as they practice howling to mimic their parents. Because of the hollow tone of the howl, a pair of coyotes often sounds like a huge group and it is easy to think that they are closer than they are actually.

The coyote gets a good deal of attention today, because of its tendency to prey on livestock and domestic pets. Despite intensive control efforts, in the form of state bounties and federal control programs, coyotes thrive, primarily due to their adaptable nature. When populations are lowered, the remaining coyotes respond by breeding at a younger age and producing larger litter sizes with high pup survivorship. Coyotes can exist in areas once thought unsuitable (such as suburban and urban environments) and exhibit great plasticity in their behavior and diet. Coyotes are naturally wary of people and will avoid areas in which threats are perceived. They will also become acclimated to humans in the absence of threats (such as hunting and trapping pressure) and coupled with the availability of unnatural food sources, such as dog food, garbage and unsupervised small pets.

**Wild Facts**

**Classification**

Class: Mammalia  
Order: Carnivora

**Average Size**

Length: 3-4 ft.  
Height: 2 ft. at shoulder  
Weight: 20-44 lbs., with females a few pounds less.

**Food**

Small mammals such as rabbits, rodents, birds, woodchucks, as well as birds, insects, and the occasional deer. Commonly eats fruits such as plums, persimmons, watermelons, and grapes.

**Breeding**

Coyotes generally mate for life. Mating occurs January to March. Gestation period is 60 to 63 days.

**Young**

Called pups. Litter size is 6-8. Blind at birth. Weaned at 5 to 7 weeks. Fed by both parents and by helpers. Emerge from den at 3 weeks. Learn to hunt at 8 to 9 weeks.

Continued from front page

Coyotes are opportunistic in finding food and resources available in these places. Coyotes are territorially and actively keep non-family members outside their home range. Coyotes defend their territory through howling, scent marking with urine, body displays, and confrontation with trespassing coyotes.

Dispersal rates among coyotes is high. When an individual coyote or family group leaves or is removed, it is likely that new coyotes will move into the vacant territory. This makes population estimation difficult, which in turn makes control difficult.

A coyote’s territory is usually 2 to 3 square miles. These territories frequently overlap with a transient coyote that is searching for a mate or its own territory.
NCWRC Interaction

N.C. State University, in cooperation with the N.C. Wildlife Resources Commission, is conducting a study on the food habits of large canids (i.e., coyotes, red wolves, red wolf-coyote hybrids) on the Albemarle peninsula in eastern North Carolina. This is an area where red wolves were released in the late 1980s by U.S. Fish and Wildlife Services. Food habit studies of coyotes have been conducted in other southeastern states but unlike North Carolina, the coyote is the top predator in these states due to the absence of red wolves. This study is unique in that it will not only document the food habits of North Carolina coyotes, but will examine the diets of two co-existing large canid populations in the southeastern United States. Researchers will analyze if red wolves and coyotes use food resources differently, either on a temporal or spatial scale, which will aid in increasing our understanding of the relationship between these two co-existing populations.

Scat is one way biologists track coyotes.

Q&A

1. What prevailing factors have caused the coyote to move into North Carolina?
   - Changes to the landscape
   - Loss of the coyote's natural enemy, the grey wolf

2. With what animals have coyotes been known to inter-breed?
   - Grey wolf
   - Red wolf
   - Dogs

3. How many mates does a coyote have over its lifetime?
   One. Coyotes mate for life.

4. How many pups are in a normal litter and what can cause the litter to increase in number?
   6 to 8 pups. The number sometimes increases as population is reduced.

Links

To watch a video of coyotes and hear coyote sounds, go to http://kids.nationalgeographic.com/Animals/CreatureFeature/Coyote.

References

Credits
The N.C. Wildlife Resources Commission is an Equal Opportunity Employer, and all wildlife programs are administered for the benefit of all North Carolina citizens without prejudice toward age, sex, race, religion or national origin. Violations of this pledge may be reported to the Equal Employment Officer, N.C. Wildlife Resources Commission, 1751 Varsity Dr., Raleigh, N.C. 27606. (919) 707-0101.