

The Coyote: *Facts and Myths About Living with This Wild Canid*

The coyote (*Canis latrans*) is a relative newcomer to the southeastern United States but has long been distrusted. The presence of coyotes in the United States in both urban and rural settings is becoming more common; therefore, the likelihood for human-coyote contact and conflicts is increasing. To reduce such conflicts between humans and coyotes, it is important that we understand their behavior and natural history. Attempts to curb coyote populations often have succeeded in only increasing coyote numbers, making it more important for humans to learn how to live with them. This is particularly necessary because coyotes adapt well to urban and suburban environments, and they often are considered to be the top predator in such habitats.

Characteristics

From a distance, coyotes can be hard to distinguish from medium-sized domestic dogs. In Alabama, coyotes on average weigh between 20 and 50 pounds but can be larger. They usually are slim and have long legs and bushy tails. They have a slender muzzle and large, pointed ears that stand up straight. Coyotes usually are a tan or grayish color with black and white highlights, particularly along the mane, rump, and tail. The throat and underside are white. Variations in color have been noted, with black phases particularly evident where interbreeding with red wolves has occurred.

Coyote tracks are similar to those of domestic dogs, with the front and rear paws registering four toes and a central paw pad. Unlike the tracks of cats (pumas, bobcats, or domestic cats), which show central paw pads with two lobes toward the front and three toward the back, coyote tracks (and those of other canines) show only one lobe in front and two lobes in back. In coyote tracks, an X can be drawn in the space between the toe pads and the central pad. Claw marks are



The coyote (*Canis latrans*) has become a familiar critter in Alabama.

usually evident because canines cannot retract their claws like cats can. A typical hind foot track may be 2.4 to 3.3 inches long and 1.6 to 2.4 inches wide, and the front foot track is larger.

Coyote feces vary in appearance but can be tubular, crumbly, shapeless, or twisted with bits of bone, feathers, or hair tightly wrapped inside.

New Kid on the Block

Coyotes have only been an integral part of Alabama's wildlife for the past 50 years or so. Coyotes expanded their range eastward following the elimination of gray and red wolves in the early 1900s. There is substantial evidence that many of the first coyotes to head east bred with the remnant populations of red and gray wolves as well as with domestic dogs.

The increase in cleared and agricultural land in the Southeast has made the habitat more suitable for coyotes. Although routes of travel for dispersing individuals are uncertain, coyotes first began appearing

in the Southeast when humans started releasing them here in the early 1900s for hunting purposes. Quickly following these translocations, the full force of the expanding populations reached Alabama through natural means in the 1960s. Currently, coyotes live statewide in Alabama, and even more impressively, they are present throughout the continental United States and much of southern Canada.

Life History

Coyotes begin breeding in February, and their breeding season generally continues into March. Coyotes usually are not monogamous for life, but a female may keep the same mate for several years. Typical denning sites can be anything from culverts to hollow logs, abandoned burrows, rocky crevices, or any other type of shelter. Coyotes generally use existing dens that they renovate, but they will sometimes dig new dens. The male and female may prepare several different dens so that the family unit can be relocated often when pups are young. This movement may help the pack avoid detection, or they may abandon den sites due to excessive parasites.

About 60 to 63 days after mating, usually sometime in April, the female will give birth to 2 to 12 pups. The average litter size in Alabama is 2 to 6 pups. Coyote pups are born with their eyes closed and begin to open them by about 2 weeks of age. Pups consume only milk during the first weeks of life but are soon introduced to meat. Both parents stay in or near the den while the pups are small.



Coyotes usually are tan or grayish, with black and white highlights.

When the pups are older, the pack will abandon the den entirely and leave the pups in a sheltered rendezvous location during resting activities. Pups remain with their parents until autumn or early winter, at which time they disperse. Both males and females can breed at 1 year old, but juvenile females will breed less often than will adult females. Juveniles may stay with their family unit if they do not mate during the first year.

Behavior

Coyotes are largely crepuscular, which means they are mostly active at dawn and dusk, but they may be observed at any time of the day. Packs are territorial and are formed around the family unit. A pack usually consists of an alpha male and female, which are mates, their pups, and any pups from the previous year that have not mated. Other unmated males and females may establish a territory of their own or remain nomadic.

A coyote's home range varies based on the availability of prey, habitat, season, and whether the coyote is male or female, part of a pack or solitary, and many other factors. Territories may be as large as 10 square miles or as small as 1.5 square miles. Nomadic coyotes may even have home ranges of more than 35 square miles. Populations appear to occur at higher densities in the southern states as opposed to northern states, and densities may vary from fewer than 1 coyote to more than 15 per square mile, depending on the habitat. A few wild coyotes have lived to be 12 years or older, but most of the population is less than 3 years old.



In Alabama, pups are usually born in April.



Coyotes seem to be most common in mixed agricultural and wooded habitats.

Habitat

Coyotes in Alabama are not limited to a single habitat but adapt to most existing habitats. They can be found from woodlands to agricultural fields, along riparian (stream) habitats, and in cities and suburbs, although they seem to be most common in mixed agricultural and wooded habitats that have available water.

Food Habits

Probably the most amazing aspect of coyote behavior is the variety of foods that they consume. Coyotes are opportunistic generalists and will eat almost anything. They will consume many types of vegetation, from grasses to seeds to fruits and berries. Persimmons, plums, and grapes are particular favorites when available. Reptiles, rodents, rabbits, white-tailed deer fawns, birds, insects, carrion, and many other types of small prey are on their menu. Coyotes are responsible for

significant predation on sheep in the western United States and have been known to prey on poultry, cattle, pigs, and goats, as well, although much of the occurrence of livestock and poultry in their diet is the result of scavenging carcasses. Coyotes sometimes kill and eat domestic pets (dogs and cats) as well, although this is probably an infrequent event. They also depredate gardens and crops, especially melons. It is safe to assume that most things are considered edible to coyotes.

Benefits and Uses

Coyotes are classified as furbearers and game animals within Alabama. About 500,000 coyotes are harvested annually in the United States through trapping and hunting. In fact, the first translocations of coyotes into Alabama were for sport hunting. There currently is no bag limit or closed season for harvesting coyotes in Alabama, and many people enjoy hunting them. Refer

to the current Alabama Regulations Relating to Game, Fish and Fur-Bearing Animals, available at the Alabama Department of Conservation and Natural Resources Web site (www.dcnr.state.al.us/), for specific regulations on trapping and hunting.

As a member of the wildlife community of Alabama, coyotes may play several roles. Predation may function to regulate populations of white-tailed deer, although it is unclear whether their effect on deer is significant. Rodents and insects form a significant portion of the coyote diet, making them possible eradicators of some pest species. Although specific data are unavailable, the carrion-scavenging behavior of coyotes may make them an important part of nature's cleanup crew. In addition, coyotes can be enjoyable to watch from a safe distance.

Damage Concerns, Management, and Control

In areas where coyotes and people live together, people may have concerns about coyote populations for different reasons. Hunters often are concerned that coyotes will decrease local populations of game animals, such as white-tailed deer, wild turkeys, and quail. While coyotes opportunistically prey on turkeys and quail, the incidence of these species in their diet is low to nonexistent, and, in most instances, coyotes do not negatively impact populations of game birds.

Although deer hair is frequently found in coyote scats, many incidences are the result of scavenging rather than predation. There is some evidence that predation on fawns may be reducing recruitment (successfully

raising offspring) of white-tailed deer locally in some areas. Intense, sustained removal of predators can increase recruitment in those few cases. However, fawns experience high rates of mortality independent of coyote predation.

Predation on livestock is a well-documented phenomenon. However, some of the incidence of these species in the coyote diet is the result of scavenging carcasses that have been improperly disposed. Discouraging predation of livestock is possible but can be challenging at times. Approaches that have been shown to work include proper disposal of livestock carcasses (burying or removal), use of exclusion fences (electric or woven wire with small mesh), locating livestock closer to humans (especially at night), use of guard animals (dogs, donkeys, llamas), and of course, removal of predators.

Individual predators sometimes learn how to become efficient predators of livestock. In this instance, removal of specific individuals that are responsible for the predation may reduce losses. More generalized predator control can be implemented but may show mixed success.

Control of predators by intense and sustained removal of coyotes has been shown to increase the average litter size per female, as resources become more abundant when the population of adults is decreased. Removal of coyotes via trapping and shooting can reduce local populations, but it must be performed on a continual basis to reap benefits. Coyotes are extremely wary, but they can be trapped. Leghold traps (Nos. 2, 3, and 4) seem to work best. Snare sets, where legal, can also be used with some success. Strategies



Coyote on the prowl.



This coyote is comfortable in a residential backyard.



Coyotes can be enjoyable to watch from a safe distance.

used to manage damage to livestock can also be used to reduce damage to melons and other crops. For more information about controlling coyotes, see Extension publication ANR-0587, "Coyote Control in Alabama."

Coyotes may prey opportunistically on cats, small dogs, and occasionally on large dogs. However, the overall occurrence of pets in coyote diets in Alabama is low to nonexistent. To reduce the opportunity for conflict between pets and wildlife, pet owners should keep cats and small dogs inside and not left unattended in open yards. Fences can help deter coyotes from entering yards, and removing pet food at night and keeping lids on garbage cans will reduce access to foods that may attract coyotes and other wildlife to one's yard.

Although coyotes do on occasion attack humans, the number of cases is miniscule in comparison to the number of attacks by domestic dogs. Approximately 15 to 20 people are killed every year by domestic dogs, whereas coyotes are responsible for approximately two nonfatal injuries per year. It is unlikely that you will ever be confronted by an aggressive coyote. Most attacks that do occur are the result of coyotes becoming habituated to people because they have been fed or encouraged to approach people, either purposefully or unintentionally. Over time and with enough positive reinforcement, habituated coyotes may become bolder. Reducing the risk of habituating coyotes to human contact is a process similar to reducing habituation in nearly all wildlife species.

The following are some general practices to follow:

- Do not leave sources of food within reach of wildlife.
- Do not feed or intentionally approach wildlife.
- Do not encourage wildlife to approach you.
- Do not run away if you encounter wildlife, as this behavior encourages predators to give chase.

Although coyotes, like all mammals, can contract rabies, they are not significant carriers of this virus in Alabama. Coyotes do not constitute high risks for other disease transmission, although they should not be approached at any time. Vaccinating pets for common diseases is advisable, regardless of contact opportunity with wildlife.

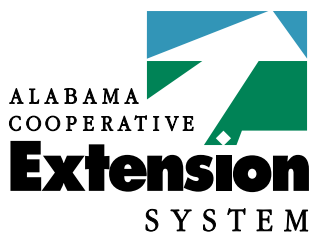
Coyotes Near You

Due to the highly adaptive characteristics of the coyote, this species has become increasingly common in urban and suburban areas. It is not unusual to see a coyote loping across residential backyards, slipping into an abandoned woodlot, or drinking from a roadside pool of water in the city. As coyotes' presence becomes more common in urban and rural settings, the likelihood for human-coyote conflicts increases, which is why it is important to understand their behavior and history. Coyotes are here to stay, but as long as we understand the possible areas of contention and practice responsible methods of avoidance, it is possible for humans and coyotes to inhabit the same areas of Alabama with minimal conflict.



Do not feed coyotes or any other wildlife because doing so encourages habituation and can endanger both people and wildlife.

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