

Gray Fox

Urocyon cinereoargenteus

Though both the red fox and the gray live in North Carolina today, the gray fox is the state's only native fox species. Red foxes were brought here from Europe by fox hunters in the early 1700s. Even though storytellers and writers have depicted the red fox as cunning, intelligent and shrewd, the gray fox appears to be winning the survival contest in areas where coyotes have expanded in recent years. As coyotes become more abundant and expand their range into areas inhabited by both red and gray foxes, the red foxes are displaced while gray fox populations do not seem to be affected. Since gray foxes have the ability to climb trees, it is possible that they are able to escape from coyotes.

History and Status

The gray fox is probably as common in North Carolina today as it has been over the past million years. Hunting and trapping activities do not appear to affect overall mortality in gray fox populations. Foxes reproduce well and are able to disperse annually into areas where they have been harvested. Local fluctuations in populations are most often due to periodic outbreaks of canine distemper virus. This virus is an "old world" disease which did not historically occur on the North American continent. Since gray foxes evolved without exposure to this virus, they have no immunity and all gray foxes exposed to this disease die. Preliminary studies indicate that even with high mortality following canine distemper

virus outbreaks, gray fox populations recover to former levels in just a few years.

Description

The gray fox is slightly smaller than the red fox and is much darker in overall coloration. Gray foxes are sometimes confused with red foxes because of a reddish or rusty coloration on the sides of their necks and on their legs. The overall coloration is best described as a salt-and-pepper gray with a dark streak extending down the back, along the top of the tail and ending in a black tail tip. Adults may weigh as much as a red fox (7 to 15 pounds) but their shorter legs and shorter fur make them appear smaller. The most obvious sign of the presence of gray foxes is tracks that are similar to domestic cat tracks. Since gray foxes are more adapted to warmer climates than red foxes, there is little or no fur between the toe and foot pads, resulting in a more distinct track than that left by red foxes.

Habitat and Habits


Gray foxes thrive in diverse habitats and are able to exploit many different habitat types.

Viable populations are found in all of North Carolina's major habitat types. Like populations of most other wildlife species, gray foxes are most dense in the more productive areas of the state such as the Piedmont and northern Coastal Plain. Although they are often present in large, connected tracts of wooded areas, they also thrive in open farmland. Like other canid predators, gray foxes forage on a variety of prey such as mice and rabbits. Unlike many other canid predators, they also eat a significant amount of wild fruit and agricultural crops such as corn and peanuts.

Gray foxes are normally nocturnal although occasionally they may forage during daylight hours of long summer days or during extremely cold weather in winter. Gray foxes mate once a year during January and February in



Range Map:

Found statewide 

North Carolina. Pups are born in March through April. Three to five pups are born in a den which may be only a hollow log or tree stump. It is suspected that the male adult stays with the female and assists her in bringing food to the pups until early fall when the pups reach adult size and disperse from the natal area. During the late fall and early winter gray foxes establish new home ranges.

Although canine distemper virus outbreaks have been documented as a major mortality factor for gray foxes in North Carolina, the effects of current rabies epidemics on regional gray fox populations are not known.

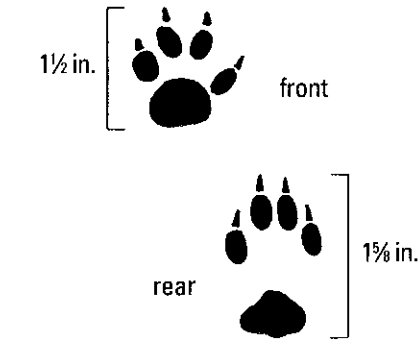
Range and Distribution

Gray foxes are found in 45 of the 50 states and are only found in North America and Central America. This species is absent from the northern Rocky Mountain and Canada. In North Carolina, gray foxes inhabit all areas of the state from the outer banks to the Appalachians. Over the past 50 years, gray fox populations have expanded into areas where previously they did not occur. Biologists believe that fire suppression and increased agricultural production in the northern Great Plains areas has altered the habitat, thus enabling the fox to expand its range.

Home ranges of gray foxes vary among individuals and depend on the time of year. Reported home range sizes extend from 74 acres to over 6,000 acres. The most important factors determining the size of gray fox home ranges are habitat quality, population density and the reproductive status of individual foxes. Areas with many different habitat types and dense populations of prey species support higher densities of gray foxes with smaller home ranges since they are somewhat territorial.

People Interactions

Gray foxes rarely venture out



during daylight hours. If you see one during the daytime, approach it with caution since this abnormal behavior is usually associated with diseases such as rabies or canine distemper virus. Gray fox fur became popular during the late 1970s for fur coats and collars and demand for their fur continues today to some extent. Gray foxes are very adaptable and are found in many urban environments where food left outside for pets supplements their normal diet of mice and rabbits. Most people are likely to see gray foxes killed by vehicles during the early fall when young foxes are dispersing from their natal home ranges into new areas and searching for mates.

References

- Chapman, J. A., and G. A. Feldhamer, eds. *Wild Mammals of North America: Biology, Management, and Economics* (Baltimore: Johns Hopkins Univ. Press, 1982).
- Rue, L. E. III. *Furbearing Animals of North America* (New York: Crown Publishers).

Credits

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WILD Facts

GRAY FOX

Classification

Class: Mammalia
 Order: Carnivora

Average Size

Height: 30 to 45 in. (to front of shoulder)
 Weight: 12 to 15 lbs.
 Weight: 7 to 11 lbs.

Food

Mostly primary food sources are mammals and birds. They also feed on birds, and insects. Occasionally they eat vegetation and berries. Well adapted to all types of terrain and they are very adaptable to human habitation.

Breeding

Gray foxes usually have one litter a year. Males probably mate with only one female each year and may mate with the same female more than once. Sexual maturity is reached by early March.

Young

Gestation period: 69 days
 Litters: 2 to 5 (to 6) pups
 Pups: eyes open in 10 to 12 days. Pups are weaned in 10 weeks and they disperse from the family group in early fall. One litter per year.

Lifespan

Average: 2 years, few live longer. Most of young that are wild and hunted die by age 60 percent of others.