

West Virginia
Wildlife
Series

*A Guide to Mammals of West
Virginia*

Gray Fox (*Urocyon cinereoargenteus*)



Volume 2

Characteristics:

The gray fox is a peppery gray on top, reddish-brown on its sides, chest and the back of its head. Its legs and feet are also a reddish color. It has a long bushy tail with a black stripe on top. The gray fox has pointed ears, a pointed muzzle and long hooked claws. The gray fox is often confused with the red fox because the gray has rusty-red fur on its ears, ruffs and neck. Overall coloration is gray, and the darkest color extends in a suggested stripe along the top of the back down to the end of the tail. The belly, throat, and chest areas are whitish in color.

Gray fox appear smaller than red fox. The shorter leg length and stockier body are deceptive. Many gray fox weigh about the same as red fox in the same habitat types. Males and females both weigh 8 to 11 pounds on average. Weights are often about 8 pounds in southern states and nearer 11 in northern states. Compared to red fox, grays have shorter muzzles and shorter ears which are usually held erect and pointed forward. Many grays stand about 15 inches tall at the shoulders and overall lengths are around 40-44 inches including a tail of 12 to 15 inches.

The claws on a gray fox are strong. They are not retractable. Gray Fox have dark eyes with elliptical pupils. Teeth number 42, including 4 canine teeth. Both male and female gray foxes have a scent gland under the skin on the top of the tail.

Range:

The gray fox can be found from southern Canada to northern Columbia and Venezuela. It is not found in some mountainous parts of the Northwest United States and in the Great Plains. Home range is 2 to 4 miles depending on abundance of food.

Habitat:

The gray fox lives in a wide variety of habitats but prefers areas with lots of brush or woods.

Diet:

The gray fox is a solitary hunter and eats a wide-variety of foods. A large part of its diet is made up of small mammals like mice, voles and eastern cottontail rabbits. It also eats birds; insects; and plants like corn, apples, nuts, berries and grass. In the summer and autumn, grasshoppers and crickets are an important part of its diet. Although gray fox have a keen sense of smell, they seldom track prey species. The preferred method of hunting is to wander this way and that until a victim is heard or smelled. The gray fox will often stalk and pounce upon the prey. Meat items frequently eaten by gray fox include rabbits, mice, squirrels, rats, and insects. Game birds are frequently eaten, including quail, turkeys and ruffed grouse. Nesting adults are frequently killed, and all ground nests are vulnerable within the territory of a gray fox. Grays will eat carrion and vegetation eaten includes virtually all fruits, nuts, and berries.



Omnivores:

Some animals eat both plants and animals. They are **omnivores**. Omnivores include mammals like [grizzly bear](#), [striped skunk](#) and [raccoon](#) and birds like the crow, the [blue jay](#) and the woodpecker. Because they will eat plants and animals, omnivores survive well in many environments. Some omnivores, like the [raccoon](#), the [opossum](#) and the seagull have no problem adapting to living near humans. They often will dig through garbage cans, dumpsters and gardens to find food.

What did you have to eat today? If you are like most humans, you probably had meat and plants! Humans are omnivores too! Our teeth are designed to eat both meat and plants. Our front teeth help us rip into meat and bite into fruits and vegetables, and our molars help us grind up meat and chew fruits and vegetables. Many omnivorous animals also have teeth that help them eat both plants and animals.



Diseases common to Foxes:

Foxes are known vectors for rabies and can transmit the disease to humans and other animals. Gray fox are able to resist mange. A more important disease of grays is distemper, which is oftentimes fatal. This disease can decimate gray fox populations whenever

there is opportunity for contact between individual animals. Gray fox are also susceptible to parvo enteritis, rabies, roundworms, tapeworms, lice and mites.

Communication:

Like all canids, gray foxes have excellent senses of sight and smell. The gray fox uses several vocalizations of yapping, howls, barks, soft whimpers and screams, but is less vocal than the red fox.

Life Cycle:

Gray fox are thought to mate for life. The breeding season extends from January to May, with peak periods around the first of March. Gestation varies from 51 - 63 days.

Most gray fox breed and raise litters during their first year of life. There is one annual litter and 3 or 4 pups are a common litter size. Male gray fox bring food to the denning female and assist in teaching the pups to hunt. Mating season is between January and April. About 53 days after mating, the female gives birth to one to seven pups. The male helps feed the pups. They are weaned when they are about three months old and are able to hunt on their own when they are four months old. The pups leave their mother in the autumn. The same males and females usually mate together every year.



Gray foxes may live 6 to 10 years in the wild and has lived 10 years in captivity.

Behavior:

The gray fox can climb and will occasionally forage for food or rest in a tree. It makes its den in rocky crevices, caves, hollow logs and trees. It will sometimes enlarge a woodchuck burrow and use it as a den. Dens are usually used only during the mating season and when raising young. Gray fox seldom are seen because they are normally active only during the night and because of the brushy habitat they frequent.

Gray's are very territorial. These home ranges are usually one square mile or even less. Because a gray fox might spend years or even its entire life in this small range, they soon learn to know their ranges very well. Travelling habits are erratic as the gray fox seems to wander within its territory seeking foods. This species will eat a variety of foods, including whatever food is available at the time. If food is abundant, gray fox will become fatter and heavier than usual.

The tree climbing ability of gray fox is unique. Grays can climb trees that are straight up and they do not require leaning trees to climb. These fox will climb trees at times to escape predators and they also climb because they seem just to like to. At times, gray fox will climb trees to take a nap in a sunny location, and they have been known to hide or sleep in hawk and owl nests. Rarely, gray fox will also raise their litter twenty or more feet above ground in a hollow tree. Gray fox climb trees head first, and they have the ability to descend a tree either tail first or head first.

Gray fox use dens more frequently than do red fox. These dens are usually underground cavities, and the same dens are often used year after year. Dens seem to be used more frequently by gray fox in northern locations, as compared to southern location. Cold weather and deep snow hamper gray fox, so a likely explanation is that the dens provide more warmth for the northern grays.

Dispersal distances of young gray fox are short. Most young grays relocate and select new home ranges within a mile of their birthplace. For that reason, high densities of gray fox can sometimes be found in suitable habitats.

Identifying Grey Fox Scat:

Gray Fox scat is about $2 \frac{1}{2}$ inches long, $\frac{1}{2}$ inch in diameter, segmented, tapered at one end, sometimes both and often covered with fine rodent fur. It is similar in shape and size to red fox scat, except that gray foxes normally eat a more vegetarian diet of berries and fruits, making their scat darker, and showing a predominance of seeds and undigested berries when these fruits are in season.

Grey Fox Tracks:



FRONT



HIND

Gray fox tracks show four toes and claws. Sometimes, the semi-retractable claws do not show. Their tracks average less than two inches in length. Tracks commonly run in straight lines, one print in front of the other. Front and hind prints overlap each other and appear as one print. Only foxes and members of the cat family walk in this manner. In fine mud, the hair on the foot may be visible in the track. The forefoot registers better than the smaller hind foot, and the hind foot's long, semi-retractable claws do not always register. The heel pads are often unclear - they sometimes show up just as small, round dots. When it walks, this fox leaves a neat

alternating track pattern; when it trots, its prints fall in pairs, with the fore print set diagonally behind the hind print.

Number of toes: four on front and four on rear

Front Foot: 1 5/8 in L x 1 3/8 in W

Rear Foot: 1 1/2 in L x 1 1/4 in W

Straddle: 3.2 - 4.2 in

Trail Width: 3 3/4 in

Slow Stride: 8 - 12 in

Running Stride: 18 - 36

Definitions:

Straddle - The distance between the insides of opposing feet.

Pitch - The distance a foot angles in or out in relation to the animals' line of travel.

Trail Width - The distance between the outermost prints in any one pattern.

Stride - The distance from the foremost toe of one print to the foremost toe of the next print.

Track Size - The length and width of a track. (Sometimes used to determine species.)

This series of Wildlife guides has been compiled and edited by Bill Church.

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