

West Virginia Wildlife Series

*A Guide to Mammals of West
Virginia*

*Red Fox (*Vulpes vulpes*)*



Volume 1

Characteristics:

The red fox has orangish-red fur on its back, sides and head. It has white fur under its neck and on its chest. It has a long bushy tail tipped in white, pointed black ears and black legs and feet.

Range:

The red fox can be found in most of the United States and Canada, except for the far north in Canada and Alaska and much of the western U.S. and Hawaii. The red fox can also be found in Europe and Asia and it has been introduced to Australia. Its home range is about 2 square miles, and it sometimes travels up to 5 miles in a night.

Habitat:

The red fox makes its home in wooded areas, prairies and farmland.

Diet:

The red fox eats a wide variety of foods. It is an [omnivore](#) and its diet includes fruits, berries and grasses. It also eats birds and small mammals like squirrels, rabbits and mice. A large part of the red fox's diet is made up invertebrates like crickets, caterpillars, grasshoppers, beetles and crayfish. The red fox will continue to hunt even when it is full. It stores extra food under leaves, snow or dirt.

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.

Communication:

Red foxes use a variety of vocalizations to communicate among themselves. They also use facial expressions and scent marking extensively. Scent marking is through urine, feces, anal sac secretions, the supracaudal gland, and glands around the lips, jaw, and the pads of the feet. There have been 28 different kinds of vocalizations described in red foxes and individuals have voices that can be distinguished. Vocalizations are used to communicate

with foxes that are both nearby and very far away. Red foxes have excellent senses of vision, smell, and touch.

Life Cycle:

The red fox mates from January through March. The female will make one or more dens right after mating. The extra dens are used if the original den is disturbed. A little less than two months after mating, the female gives birth to a litter of between one and ten kits. The male brings the female food while she is caring for the kits. The kits start playing outside the den when they are about a month old. The mother begins feeding her kits regurgitated food, but eventually she will bring them live prey to "play" with and eat. Playing with live prey helps the young kits develop the skills they will need for hunting. The kits leave their mother when they are about seven months old.



Behavior:

The red fox is mostly nocturnal, although it will sometimes venture out in the day. The red fox, unlike other mammals, hears low-frequency sounds very well. It can hear small animals digging underground and will frequently dig in the dirt or snow to catch prey. The fox stalks its prey, much like a cat. It gets as close as it can and then pounces and chases its prey.

Except for breeding females, the fox doesn't usually use a den. Sometimes it will sleep in the open, wrapping its bushy tail around its nose to stay warm. When it does use a den, it will usually find an abandoned den of small burrowing animals such as rabbits instead of making its own den.



Identifying Red Fox scat:

Red fox scat is very similar to the scat of other canids, being cylindrical, segmented, and tapered at the ends, but with a predominance of berry seeds and vegetable matter when green foods are available. It is often with an outer covering of rodent fur wrapped around small bones. The scat is about $\frac{1}{2}$ inch in diameter by 4 inches long.

Red Fox Tracks:



FRONT



HIND

The trail of the red fox generally follows fence lines and the edges of forests and fields in a straight line but this line may vary depending on the animals speed and gait. The print is usually smaller, longer and narrower than that of a dog. The front print is wider and larger than the pointed hind print. The heel pad is an inverted V-shape with a unique calloused ridge across the center of the pad. Red fox tracks are usually larger than those of the gray fox, but with smaller toe pads. The hind foot is slightly smaller and narrower than the front, with the claws showing. In the north, feet are heavily furred in winter and the heel pads of all 4 feet are two-lobes, leaving a chevron-shaped print. The most distinguishing characteristic is a ridge that runs across the heelpad, also in a chevron shape, that prints more deeply than the rest of the pad.

Number of toes: 4 front - 4 rear

Front Foot: 2 3/8 in L x 2 in W

Rear Foot: 2 1/8 in L x 2 in W

Straddle: 3.2 - 4.2 in

Trail Width: 4 1/2 in

Slow Stride: 10 - 14 in

Running Stride: 18 - 36 in

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
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