

Fabulous

Fox Family

In winter, red fox parents get ready for a den full of kits in spring.



TEXT AND PHOTOGRAPHY

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LATE ONE WINTER DAY, the male red fox made his appearance. Hungry, he had risen from where he slept on a steep, grassy knoll, yawned a broad yawn, and jogged off to begin his evening hunt.

Unless you are lucky enough to have seen one, you might not even know red foxes are around. They live in every part of our state in all kinds of habitats, from forests to fields. Even if you live in a big city, there's a good chance these shy animals are nearby.

The red fox is one of the more common *predators* in Minnesota. A predator is an animal, bird, fish, or insect that eats other animals to survive. A red fox is most active in early morning and late evening when it goes out to hunt.

If you do spot a fox, it will probably look like a red flash as it darts into hiding. But in winter, because its beautiful red fur makes it stand out against the snow, the fox is easier to see.



The **Dog** Family

Red foxes are in the dog family, or *Canidae*, as are wolves, coyotes, and gray foxes. The red fox (*Vulpes vulpes*) is much smaller than wolves and coyotes, but larger than a gray fox. An adult red fox weighs less than 15 pounds and stands about 16 inches tall. It is about 3 feet long, from the tip of its nose to the white tip of its bushy foot-long tail.

Some red foxes aren't red. A few are nearly solid black or silver (black with white-tipped hairs). More rare is the color variation called a "cross" fox. A cross fox has dark silver or brownish fur with a cross shape of blackish bands running down the back and across the shoulder.

In the snow you might spot fox tracks, which look like those of a small

dog. One way you can tell fox tracks from dog tracks is to see if they follow a straight or crooked path. A red fox tends to travel in a straight line to where it wants to go, such as a hunting spot, because it is focused on survival. Pet dogs aren't in as much of a hurry, and they aren't as worried about survival. They rely on their owners for food and shelter. So they poke around and sniff everything, and their tracks are often circling or wandering.

The male red fox (right) has found a vole and pounces on it. Mice and voles are main items on its menu. He also hunts for rabbits, squirrels, rats, birds, snakes, fish, insects, berries, nuts, and seeds. Sometimes the fox hides a muskrat, cottontail, or other prey to eat later.

The **Hunt**

Until it was time to hunt, the male fox slept, curled up out of the wind, in the sun. He often slept eight hours a day. But once he got hungry, he was all business. Now he headed for a field where tall grass and bushes sheltered mice, voles, and other rodents.

As he trotted silently along, his sensitive nose was searching for the scent of rodent, which he could smell even through deep snow. Smelling something interesting, he stopped. He cocked his head and turned his ears forward, listening for rustling under the snow. Every muscle in his body grew tense.

What happened next was amazing! When this fox knew where the prey was, he arched his back like a cat and jumped into the air. (A fox can leap 15 feet, farther than a kangaroo.) While completely off the ground, he continued arching until his head pointed straight down. Then, steering his decent with his tail, he plunged headfirst into the snow. He did not pounce feetfirst, as a cat would, but instead tucked his legs under and let his long muzzle burrow toward the prey.

He emerged from the snow, successful. A large vole wiggled in his mouth. He ate it quickly. Soon he found and caught another rodent. This one he buried in a safe spot, so he could return and eat it later.





The male red fox marks territory to keep other male foxes away. The fox must also watch out for wolves and coyotes, which prey on foxes.

The Territory

The fox made his rounds every day at nearly the same time. Just as you have a neighborhood where you spend most of your time, each fox has its own *territory*. In that territory, it knows every good place to hunt and hide. This fox's territory was about two square miles, about the size of 1,000 football fields.

The size of a fox's territory depends upon several things, such as how much it can find to eat in an area. If there isn't a lot of prey, the fox will have to hunt longer and further to find food, so its territory will be bigger. In a place with lots of mice and voles, a fox won't have to travel very far.

Like all foxes, this male always hunt-

ed alone. Wherever he went, he marked his territory by urinating on bushes, stumps, and rocks. He did this to warn other male foxes that this was his neighborhood and to stay away. This scent marking also helped let female foxes know that a potential mate was around.

But this *dog-fox* (that's what males are called) already had a mate. One evening they crossed the frozen river together. As they trotted along, it was easy to see that the female fox, called a *vixen*, was smaller than the male. Although they shared the same territory, it was rare to see them together. But it was February, the time of year they mate and travel as a pair.



Red foxes mate in winter. Kits are born in spring. The family stays together at least until late summer.

The Den

Much of the year, a fox sleeps wherever it gets tired. The dog-fox often napped on a fallen tree or a mound in a field. The vixen preferred a sunny hillside. But once the pair had mated, they searched for a more protected place, because in about two months they would have a family to care for.

The pair might look for a cave, hollow log, rock pile, or burrow left by a woodchuck or other mammal. Or they might dig a hole under a barn or building away from people. This pair chose a huge jumble of boulders, with many spaces inside. They also made another den in a smaller rock pile nearby. Red foxes often have two dens, perhaps so they can be ready to move their

family away from danger such as a predator or troublesome parasites such as fleas.

Their den had two entrances, as most fox dens do, so that they could quickly escape from danger. Also like most dens, this one faced south so that it was warmed by the sun. It was high on a slope with a good view, so that they could see trouble coming.

The front entrance led to the main living area, where the vixen would give birth. The vixen and dog-fox lined the inside of the den with dry grass and leaves. Using their forepaws like dogs do, they dug side tunnels to spaces just big enough for a fox to curl up.

Before long, everything was ready for the arrival of their young.

Red foxes live in North America, as well as northern Europe and Asia. Outside their den, kits sun themselves and play with each other.

Cute Kits

There aren't many creatures cuter than a baby fox, which is called a *kit*, *pup*, or *cub*. In Minnesota most kits arrive in April or May. About 52 days after the parents mated, the vixen gave birth to five kits.

Life around the fox den suddenly got crazy once the kits were born. The mother fox didn't leave the den for the first three weeks because the kits needed her body warmth. For 10 weeks she was busy nursing them. The father fox was busy hunting. When he showed up at the den, he looked like a red streak as he ran to deliver food to the mother and then got back out to hunt.


At birth the kits were blind, deaf, and toothless. After about two weeks, they opened their eyes. In another two weeks, their flopping ears perked up, their flat muzzles grew longer, and their brown fur turned red. At five weeks, their eyes changed color, from blue to yellow.

When the kits were able to keep themselves warm, the vixen began to leave the den and share hunting duties with her mate. About the same time, the kits started to explore the world outside the den. They loved to sleep in the sun. Like dog puppies, the kits were extremely cu-

rious and playful, often tussling with each other. They liked to bite things and chew on each other's tail and ears. The parents brought them small animals. The kits learned to use their teeth to take apart a whole animal to eat it.

By 2 months of age, the kits had longer legs. They grew bigger and bold, straying far from the den. A couple of kits even moved to the nearby second den. Every kit began to accompany a parent on the hunt. In this way, they also learned about their territory.

By the time the kits were 6 months old, they were as tall as the adults. Like all foxes, the youngsters were almost impossible to find and see. They left the den by midsummer.

Some young foxes will probably stay in their parents' territory for a year. Eventually, all will move to find a territory and mate of their own. 

A NOTE TO TEACHERS

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