



## MAMMALS

Status: Native Resident

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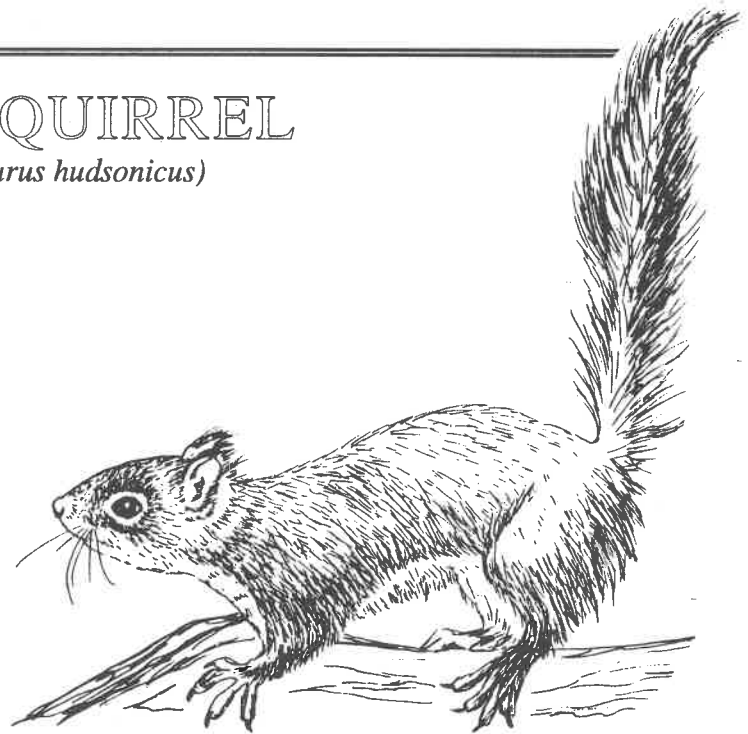
# RED SQUIRREL

(*Tamiasciurus hudsonicus*)

## Description

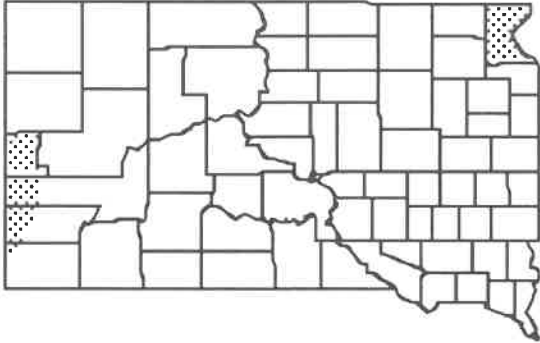
The genus name comes from two words, one of which means shade-tail (*Sciurus*). The species name refers to the fact that this species was first discovered on Hudson Bay. The red squirrel is a small *arboreal* squirrel, smaller than the gray squirrel or the fox squirrel, and weighing an average of only 11 ounces (300 grams). The red squirrel's head and body are about 7 to 8 inches (18-20 cm) long and its tail is about 4 to 6 inches (10-15 cm) long. The red squirrel is not actually red, but rather reddish-orange in color. This species of squirrel *molts* its fur coat twice each year. The summer coat appears in late spring and is brownish red on the back and sides and white on the belly. The tail is reddish on top and gray underneath. A ring of white fur around the eye is characteristic of this species. The winter coat comes in by September and is denser and longer than the summer fur. In winter, a red stripe stretches from neck to tail and the tail fur becomes more reddish on top. Reddish brown tufts of fur develop near the ears for winter also.

The red squirrel has powerful hind legs for climbing and jumping. The front legs are smaller, and have thumbs. The other fingers are longer with round, sharp



claws set close together. The toes are all the same length and more powerful than the fingers, so this squirrel can climb trees very quickly. The red squirrel's bushy tail has hairs that can be up to 4 inches (10 cm) long. The purpose of the tail is to maintain balance while the squirrel leaps from branch to branch. When the animal sits, the tail may be laid up over its back. This squirrel is one of the noisiest little creatures in the forest, noted for chattering and scolding those who venture too close. The red squirrel may also stamp its feet and jerk its tail when upset.

## Distribution



The primary habitat for the red squirrel is evergreen forest. North American red squirrels are present in the northern continental United States, and throughout the Rocky Mountains. In South Dakota, the subspecies *T.h. dakotensis* is found in the Black Hills, while the subspecies *T.h. minnesota* is found on the west side of Big Stone Lake. Squirrels found in the Black Hills are lighter in color and larger than those found near Big Stone Lake.

## Natural History

Red squirrels live in nests of twigs, bark, and leaves built in trees or in tree hollows. Nests have been found as high as 65 feet (20 m) above the ground. The nest is where the red squirrel feeds, sleeps, gives birth, raises its young, and stays warm in winter. Unlike some other species of squirrels, the red squirrel does not usually *hibernate*. Only red squirrels living in the far north of Canada actually *hibernate* during the winter. Red squirrels are *diurnal*, active in morning and late afternoon in warm months, and mid-day during the winter.

Red squirrels usually mate in early to late spring. The pregnancy lasts about 7 weeks, so the young are born in late spring or early summer. A second litter may come in late summer. A litter usually numbers 2 to 6 young, who are born furless and sightless. In a few days, fur appears on the young squirrels, but it takes about 5 weeks for their eyes to open. The mother squirrel keeps the babies

clean by holding them while she licks them. Baby squirrels spend much of their time playing and learning to obtain food. By early fall the young squirrels are ready for life on their own.

Adult red squirrels feed on *conifer* seeds from pine, spruce, and hemlock cones. They also eat berries, nuts, mushrooms, insects, and small seeds from deciduous trees, such as maples and elms. Cones and seeds are gathered in summer and fall and stored for winter in hiding places called *caches*. *Caches* may be located in small burrows or in tree hollows. The squirrel marks each spot with a special scent. Squirrels use their sense of smell to locate pine cones that are as much as 12 inches (30 cm) under the snow. The squirrel feeds sitting up on the hind legs and holding food in the front paws. After eating, the squirrel leaves piles of cone cuttings and nutshells behind.

Only about 25% of red squirrels survive to become adults. Squirrels surviving to adulthood can live to be about 10 to 12 years old. The main predators of red squirrels are hawks, owls, coyotes, and weasel-like creatures called pine martens. Squirrels escape from predators by running down tree trunks in a spiral or climbing to the top of a tree and jumping to the ground.

## Significance

Squirrels contribute to the health of the forest habitat. When squirrels bury nuts and seeds and forget to come back to get them, the forest is actually being re-seeded. This species is harvested for fur in Canada, even though prices are low.

## Management Considerations

Because of their small size, this species is rarely hunted in South Dakota. The most significant threat to red squirrel populations is loss of habitat. Most red

squirrel dens in the Black Hills are in large, old *snags* and large, downed trees in old growth forest. The older, undisturbed pine or spruce forests have the most den sites and greatest variety of food sources for these squirrels.

## Glossary

**Arboreal** - living in or among trees.

**Cache** - a hiding place to store food or supplies.

**Conifer** - any of a large group of trees and shrubs, many of which are evergreen, that bear cones.

**Diurnal** - active during the day.

**Hibernate** - to pass the winter in a dormant or inactive state with lowered metabolism and heart rate.

**Molts** - shed fur before a new growth.

**Snags** - tall, dead trees that are left standing in the woods.

## References

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## Selected Resources for Teachers

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Animals of the Prairie, Miller, W. And Larson, D. 1964 Published by the Record Printers, Grafton, ND.

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