



## MAMMALS

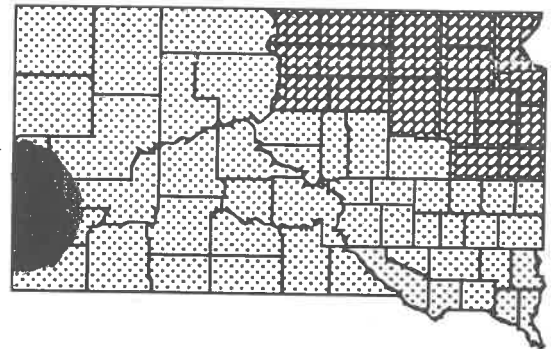
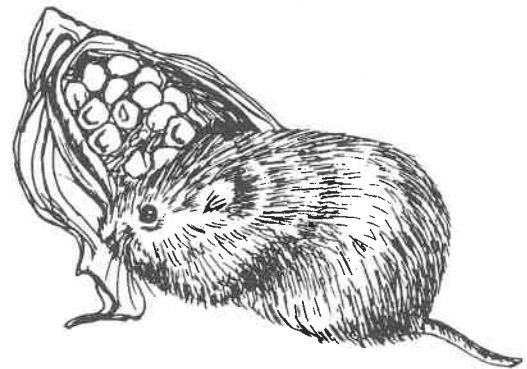
Status: Common, Native Resident

# PRAIRIE VOLE

(*Microtus ochrogaster*)

## Description

*Microtus*, Greek meaning "small ear," indicates how voles differ from most mice. *Ochrogaster* is Greek for "yellow belly," which describes how to distinguish this species from the other voles. The adult prairie vole is a small rodent with a stocky and stubby body, short tail, and four short legs. The eyes and ears are small. The fur is long and coarse with a mixture of grayish brown and black. The sides of the body are lighter and the belly is yellow to grayish white. The feet are grayish tan and the tail is dark above and paler below. Fur color is similar in winter and summer. The females and males are the same size and color. The prairie vole has an average weight of just under 2 ounces (67 gm) and ranges in length from 5 to 6.75 inches (13-17 cm). There are three *subspecies* in South Dakota that differ in size and fur color: *Microtus ochrogaster minor* is the smallest and darkest; *M. o. similis*, is intermediate in size and color; and *M. o. haydenii* is largest and lightest in color.



## Distribution

Prairie voles live in the central grasslands of North America from central Canada to Oklahoma, east of the Rocky Mountains to West Virginia. Prairie voles are found throughout South Dakota and are distributed as follows:

**Approximate Ranges of the Three South Dakota Prairie Vole Subspecies.** *M. o. minor* in the northeastern section of the state; *M. o. similis* in the Black Hills; and *M. o. haydenii* in the remainder of the state.

## Natural History

Prairie voles prefer the upland prairies of South Dakota. Areas scarred by rodent burrows are evidence of their presence. Burrows and runways are used as homes, for protection from predators, and to obtain the vegetative growth for food. The vole's food supply consists of grasses, flowering plants, roots, fruits, seeds, and bark. Prairie voles gnaw and clip at plant stems and roots, a behavior that can leave the land and soil exposed. Voles store food in underground chambers for later use during the winter. When snows melt after a harsh winter, many homeowners in prairie towns are chagrined to see bark stripped from their ornamental bushes and young trees. Much of this damage to yard plants probably was caused by voles.

Prairie voles are highly social. They have the same partner to help raise and care for offspring. The female can reproduce anytime during the season, but the main breeding times are in the spring and fall. The litter size varies from 1 to 7 young, depending on season, age of mother, and availability of food. The young voles are born in a ball-shaped nest of dry grass that is usually underground or in a small depression on the ground's surface. The babies are born naked and weigh about 3 grams. Within 8 days, their eyes will open. During the first 3 weeks, fur and

body growth is rapid, but slows after the prairie voles reach adulthood in 30 days. Prairie voles have a high mortality rate due to parasites, predators, people, and times of scarce vegetation. Predators include coyotes, foxes, domestic animals, owls, hawks, and snakes. Voles rarely live longer than a year or two. The prairie vole is an important food source for many predators on the plains.

## Management Considerations

Voles are an important food source for many predators on the plains. Loss of prairie habitat has led to extirpation of voles in many heavily-farmed areas of Iowa, Minnesota, and eastern South Dakota. In some areas, they can only be found in roadside ditches.

Voles are considered pests to lawns, gardens, and farm lands. To help control these pests, devices have been made, such as an electric repeller that is placed in the ground to scare the voles away. To further discourage voles, people have displayed copies of natural predators, such as snakes and owls, as lawn ornaments made out of plastic or cement. There are no regulations about the killing of voles. However, they are mammals, so poisons that will kill voles are also dangerous to people and their house pets. Poisoned voles are poisonous to other animals that eat them.

### Glossary

**Subspecies** - is a population of a species that is physically or behaviorally different from other populations of the species but still capable of interbreeding with them.

### References

Jones, J. Knox Jr., David M. Armstrong, R. S. Hoffman and C. Jones, 1983. *Mammals of the Northern Great Plains*, University of Nebraska press, Lincoln, NE.

### Selected Resources for Teachers

*Stories from Snowy Meadow* by Carla Stevens

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