

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

NORTH AMERICAN FAUNA

No. 49

[Date of publication, December, 1926]



A BIOLOGICAL SURVEY OF NORTH DAKOTA
I. PHYSIOGRAPHY AND LIFE ZONES
II. THE MAMMALS

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1926

A BIOLOGICAL SURVEY OF NORTH DAKOTA

Class MAMMALIA: Vertebrate Animals That Nurse Their Young

[p.43] Order RODENTIA: Gnawing Animals

Family SCIURIDAE: Squirrels, Chipmunks, Prairie Dogs, Ground Squirrels, and Marmots

Marmota monax rufescens Howell
Rufescent Woodchuck; Groundhog

Marmota monax rufescens Howell, Proc. Biol. Soc. Washington, vol. 27, p. 13, 1914.

Type locality.--Elk River, Minn.

General characters.--Heavy-bodied animals, with short ears, short legs, and short, bushy tails. Similar in general appearance to the southern and eastern woodchucks, but more reddish brown above and below. Upper parts dark brownish gray, sides and underparts strongly washed with reddish or rusty brown; feet blackish; tail black or dark brown, longhaired and bushy. Average measurements: Total length, 548 millimeters; tail, 143; hind foot, 83.11 Weight, about 8 to 12 pounds, but individuals have been recorded as heavy as 13½ and 18 pounds. (Anon., 1900; Fellows, 1881.)

Distribution and habitat.--From the Transition Zone of the eastern United States woodchucks extend across Minnesota and into southeastern North Dakota as far as Devils Lake (fig. 6). In revising the group Howell examined specimens from Fargo, Grafton, and Leonard, in North Dakota; and at the biological laboratory in 1913 there were skins collected near Stump Lake and Devils [p.68] Lake. At Wahpeton woodchucks are reported common along the banks of the timbered river bottoms. At Fargo and Grafton they are occasionally found. In 1915, Kellogg collected a half-grown young near Larimore and obtained a specimen at Grafton. While at Manvel, Grand Forks County, he saw their burrows and one young that had been captured. In 1919, Williams reported them becoming more numerous each year at Grafton. Eastgate says they are occasionally found in the forest near the biological laboratory at Devils Lake, but that they are by no means common. Apparently they fill the forested belts along the rivers, extending west from the Red River Valley and thus reaching the Devils Lake and Stump Lake forested tracts. Although mainly restricted to forested and brushy locations, where no timber is available they will live in the open. Steep banks and sidehills are favorite situations, but in many cases the burrows are found on level ground or under stumps, trees, or stones. Woodchucks are not fastidious as to habitat, the one

requisite for their existence seeming to be an ample supply of green food during the summer season.



FIG. 6.--Localities where woodchucks are known in North Dakota

General habits.--These largest and least squirrel-like of the squirrel family have generally the burrowing habits of the ground squirrels and prairie dogs. They are mainly burrowing and grazing animals, occupying the region of rich plant growth rather than the short-grass prairie, and depending to a great extent on cover and concealment for protection. They are not colonial in habits, except as mother and young remain together during the season, but if undisturbed they often multiply so rapidly as to be seriously destructive to crops and forage.

Their burrows are extensive, and instead of being one simple tunnel, usually open out in two or more directions from the central den. Near Larimore Kellogg dug out a den where an old female and her half-grown young were living. There were four entrances and three nests in different chambers. The nests were made of dry grass and leaves and one contained some fresh-cut plants, including nettles. The branches of the den were respectively 6, 7, and 9 feet long, but apparently there were other branches not discovered, as the old woodchuck and her young had been seen to enter the burrow, but could not be found. When first seen, one of the young was up in a basswood tree and when alarmed ran down into the burrow. These

woodchucks are good climbers and in places where there are no fences or rocks to serve as watch towers, they are often found up in trees where a good view can be had. They also take refuge in trees to escape from dogs and other enemies. A family of seven young is reported from Manvel, by Kellogg, and this seems to be about the average number for the species.

Food habits.--The food of woodchucks consists largely of green vegetation, with which their large stomachs are usually filled. They are particularly fond of clover, alfalfa, or any of the native leguminous plants, but will eat grass and growing grain and vegetables with great relish. In fall, flowers, seeds, and grain furnish a richer food from which more rapidly to accumulate their winter fat. Apparently they do not lay up stores of food, but depend on finding an ample supply until time to hibernate, and in spring live on their store of fat until green vegetation is available. They usually come [p.69] out in spring while the ground is still covered with melting snow. Doctor Bell took a specimen at Fargo on April 29, 1906.

Economic status.--The fondness of woodchucks for almost every kind of garden or field crop renders them serious pests wherever they are numerous. Here on the border of their range they may never become troublesome, but they should be watched and their numbers kept down wherever an undue increase is noticeable.

It is unfortunate that the habits of so many of our native animals conflict with the interests of man, as their presence would otherwise add much to the interest of life. A few woodchucks in the meadow and along the fences, where their loud, shrill whistle is occasionally heard and where they are seen sitting up in the grass or on the fence watching for danger, or with flopping tails scampering to their burrows, would add a touch of life and interest to any landscape. Their depredations, however, are too serious to be taken lightly, and it is often necessary to destroy them. Usually they may be shot or trapped, or killed with carbon disulphide placed in their burrows, but they are not easily poisoned, as there is usually an ample supply of their favorite food within reach.

Woodchucks as food.--Woodchucks have some value as food animals; their meat is like that of squirrels, but coarser. Many persons are fond of them, and in the markets they sometimes bring as much as a dollar each. There could be no cleaner or more exemplary animal in food habits and their underground dens are as clean and fresh as the abode of any burrowing animal. When necessary to destroy them their use as food should be encouraged.

Marmota monax canadensis (Erxleben)
Canada Woodchuck; Groundhog

[Glis] canadensis Erxleben, Syst. Regni Anim., p. 363, 1777.

Type locality.--Quebec, Quebec, Canada.

General characters.--In size somewhat smaller than rufescens.

Color, strongly rufescent. Average measurements: Total length, 513 millimeters; tail, 108; hind foot, 76.

Distribution and habitat.--From a range extending across Canada from Nova Scotia on the east to Fort Simpson on the Mackenzie, the small northern form of the monax group of woodchucks barely enters the extreme northeastern corner of North Dakota. One specimen collected at Pembina in 1887 was identified by Howell as belonging to this form. It was taken on the North Dakota side of the river, but after it had been seen to swim across from the Minnesota side. In 1915, Kellogg reported a few woodchucks at Pembina, but did not obtain any specimens. The river at this point has considerable timber along both sides, and woodchucks are likely to pass back and forth freely, if not during the summer, they certainly would early in spring before the river breaks up. At Walhalla they are fairly common, but by October 1, 1919, they had all denned up for winter. One found in the bank and later mounted was evidently the little dark-colored canadensis.

General habits.--The only difference in habits between this form and the more southern rufescens may be attributed to climate and environment. With a longer winter, more snow, and a somewhat different set of plants from which to draw their food supply, these [p.70] rodents readily adapt themselves to local conditions. In the shorter season they are still able to lay up sufficient fat to carry them through the long, cold winters, and in spring they come out of hibernation even while the snow is still deep. As early as March 18, in northern Minnesota, they sometimes come out on 4 feet of snow, making tracks in the soft, melting surface or on the frozen crust and visiting back and forth from one burrow to another, opened out through snow tunnels. This is the mating season, and, according to Seton (1909, vol. 1, p. 426), the four or five young are born about the end of April. Over this great northern country they are generally harmless, except where locally they come in contact with fields and gardens.