

were placed, butts downwards, about the sides of the lodge with the thin ends terminating across the apex. The apex, it should be said, was free of solid material, merely a network of sticks through which air filtered to the "room". When winter comes the welfare of the occupants of any beaver lodge can be ascertained by means of a wisp of vapour feathering through a hole in the snow above this efficient ventilator, telling of life within. Since this lodge was built it has assumed much larger proportions. In the spring of 1931, numerous sticks were thrust into the walls and covered with mud. In the autumn of 1931, a great deal more material was added than necessary to replace that lost by erosion during the summer. Owing to the lateness of the season when it was built the beavers were undoubtedly working against time and probably did no more than erect a habitation with a small margin of safety and comfort to meet the emergency that faced them.

The manner of lodge construction as shown by my observations proves conclusively that when building a habitation beavers do not leave the centre of the structure clear of accumulated material as the work proceeds, although the evidence is in favour of a deliberate intention to place little or no muck other than about the walls. I cannot say whether the floor of the lodge is made during the course of construction or after the "room" is formed, or if the inside walls of the "room" are finally covered with mud. Regarding the latter, I feel sure that no additional material is applied after the projecting sticks are cut flush with the walls and removed together with other interfering debris. In any event, a beaver lodge is a very masterful piece of work often given no more consideration regarding its technical details than an instinctively built bird's nest. There is, of course, no comparison.

Apart from lodges, every beaver pond on the Riding Mountain range includes one or more dens, visited by the beavers from time to time and probably used as hideouts when danger threatens. Burrowed in the banks of the pond at a place where the ascent of the slope is steep, they terminate in a "room", high above the water, large enough to shelter an entire beaver family. The entrance may be deeply submerged; often it is in shallow water approached by a canal, and sometimes above the surface at the water's edge. Investigation of the dens located at the sites under observation, and in many dry ponds, show that the roof of the "rooms" is from 18" to 24" below ground level, protected above by the roots of trees or shrubs in the same manner as the den behind the "bank" lodge at Site No. 1. They are generally some distance from the lodge. Never close by. I have one record of a beaver den excavated beneath a large granite boulder, the bottom of which is the roof. The length of the tunnels between the entrance and the rooms could only be roughly estimated. I would say that usually they are between 15' and 20' long, measured in a straight line from above.

A number of holes in the banks of the Vermilion river, and elsewhere in the Riding Mountain, indicate from the manner of their construction that they were excavated by beavers. As they were more or less remote from ponds there is some suggestion of occupation by migrants travelling down stream. Shredded willow bark was found in the "rooms" of more than one, together with peeled aspen-poplar sticks and other vegetable debris. It is quite possible that migrating beavers may even have survived a mild winter within these shelters, gathering food from day to day.

(To be concluded)

NOTES AND OBSERVATIONS

NIGHT ALARM.—On June 9th, 1929, at the north narrows of Moose Lake, Manitoba, I saw a bear (*Ursus americanus*) swim out just after dark to a long narrow island occupied by gulls and terns, and at its northern and nearer end only about one hundred yards from shore. In the darkness he could only be seen for a few feet after he left shore. However, pandemonium broke loose on the near end of the island, and gradually progressed along its length. After

a while all was quiet again. Unfortunately I did not have an opportunity to visit the island and see if there were any signs of his passage.

The attitude of the bear throughout was that of one who had been there before.—C. H. D. CLARKE.

MOOSE SEEKS SHELTER FOR YOUNG. — Late in August, 1929, members of a forest survey

party with which I was employed found a cow moose with her calf on an island about a quarter of a mile off the south shore of Cedar Lake, Manitoba. The island was covered mostly by willows, and has an area of only a few acres. There were so many spots bedded down, and there had been so much browsing that the conclusion was reached that the old moose had come there to calve and remained on the island thereafter.—C. H. D. CLARKE.

THE RED-BREASTED NUTHATCH (*Sitta canadensis*) WINTERING IN MANITOBA.—Mr. Frank T. Farley's note on the Red-breasted Nuthatch wintering in Alberta, which appeared in *The Canadian Field-Naturalist* of March, 1935, page 61, is of more than passing interest because of recent records of this species in Manitoba.

The first record of a Red-breasted Nuthatch in winter here was made in December, 1933, when temperatures were very low, and snows very deep.

The second record was made here in January, 1935, and several more individuals and pairs were noted in February and March in widely separated woods of this district. In all cases these birds were seen in heavy mixed woods of balsam fir, white spruce, aspen poplar, and white birch.

A nest of the Red-breasted Nuthatch was discovered on Elks Island, five miles from Hillside Beach, Lake Winnipeg, June 23rd, 1934, in mixed woods. The nesting cavity, 20 feet up in a dead birch stub was coated near the entrance with balsam gum (see Reed's *Pocket Guide*).

The Red-breasted Nuthatch is a shy species at any time, and keeping as it usually does to heavy woods it is apt to be overlooked or its calls confused with those of the White-breasted Nuthatch (*Sitta carolinensis*). Can it be that *Sitta canadensis* is in reality a Permanent instead of a Summer Resident?—FRED J. ROGERS, *Hillside Beach, Lake Winnipeg, Manitoba*.

WOODCOCK FEEDING IN DAYLIGHT.—On April 22, 1934, the writer was climbing a steep hillside on the east bank of the Don River at Toronto and was following the course of a small spring creek which had cut a deep groove in the bank when a Woodcock (*Philohela minor*) was flushed, flew a few yards and dropped back to earth, immediately becoming invisible, as is the way with Woodcock. I stood for a few minutes trying in vain to see the bird and was about to

move on when it appeared from nowhere and after running a yard or two began to feed in the black, mucky soil bordering the spring. This was just before noon on a clear day and at a distance of less than 50 feet I watched it for two or three minutes with X8 bioculars, feeling conscious at the time that I was looking at something which I had never hoped to see and might never see again.

There was really little that was remarkable about the feeding actions of this particular Woodcock, as it walked about slowly, probing deeply with its beak quite like a Dowitcher or Stilt Sandpiper on a mud-flat. Two exceptional points were noted: often, though not each time, after inserting its beak full length in the soil, the bird remained perfectly motionless for several seconds and it seemed a reasonable supposition that at such times the flexible tip of the upper mandible [maxilla] was working; also, the mucky soil adhered freely to the beak and this was scraped off with one foot after nearly every withdrawal. At this distance I could see the earthworms clearly as they were pulled out. These were, of course, immediately swallowed. A slight movement on my part and the Woodcock ran a few feet to the top of a small dry mound where it crouched with the tarsi flat on the ground. Another step and it sprang into the air and disappeared among the second growth of the hillside.

The weather had been cold enough to freeze the surface soil for several nights prior to this date so that a logical explanation of this Woodcock's evident anxiety to feed by day would seem to be that this particular spot was receiving the full heat of the sun, making the soil quite soft and, as investigation showed, well populated with earthworms.—R. J. RUTTER.

THE FORCE OF EXAMPLE.—Regarding this matter in the December '35 issue of *The Canadian Field-Naturalist*, if Mr. Stuart L. Thompson will refer to my Birds of Hatley published in *The Auk*, vol. 33, 1916, p. 70 and *Auk* vol. 34, 1917, pp. 484-85, he will find that I have recorded the Ruby-throated Hummingbird, Myrtle and Black-throated Blue Warblers as having acquired the habit of sap drinking.—HENRY MOUSLEY, Montreal.

ACADIAN CHICKADEE. (*Penthestes hudsonicus*).—The interesting compilation of "Christmas Bird Censuses, 1935" in *The Canadian*



Clarke, C. H. D. 1936. "Moose Seeks Shelter for Young." *The Canadian field-naturalist* 50(4), 67–68. <https://doi.org/10.5962/p.339898>.

View This Item Online: <https://www.biodiversitylibrary.org/item/89296>

DOI: <https://doi.org/10.5962/p.339898>

Permalink: <https://www.biodiversitylibrary.org/partpdf/339898>

Holding Institution

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Ottawa Field-Naturalists' Club

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.