

NOTES AND OBSERVATIONS

Common Redpolls excavating snow burrows and snow bathing: A dozen Common Redpolls (*Carduelis flammea*) first appeared at the Furness home feeding station near Moriah Center, Essex County, on 2 Jan 1987, and during the following weeks as many as 150-200 were daily visitors. Many would roost on the nearby garage roof while waiting their turn at the already crowded feeders stocked with niger seed. Normally they just sat there, but on the early morning of 9 Feb Furness noted some feverish activity among the rooftop redpolls about 7:15 a.m.

A series of January storms had left a couple of feet of wind-drifted snow on the garage roof. On the morning of 9 Feb this was covered by three inches of fresh powder snow, left during the night. The temperature was 5°F, the wind east at about 20 m.p.h. or more, providing a sub zero windchill factor. The roof of the garage is just 30 feet opposite a living room window, and observations were made with binoculars at close quarters.

The Common Redpolls were actually excavating by beak and foot small snow caves in the drift. Once they had excavated in two or three inches, they turned around, heads pointed out, and simply roosted in these little holes, presumably to conserve body heat and to stay sheltered from the 20+ m.p.h. winds. Of the total flock of 150-200 individuals present, about half were engaged in this burrowing activity at any one time. As some left their caves and flitted down to the feeders, others took up residence in the vacated holes, or displaced individuals who were already occupying burrows. This activity continued until Furness had to leave at 8:00 a.m. and apparently involved most of the flock. This appears to be the first recorded observation of such activity by Common Redpolls, although the number of birds involved suggests that such protective burrowing may be a well-developed trait in this northern species.

Cade (1953) suggested that the Common Redpoll "has a sufficiently adventure-some disposition to utilize sub-nival situations" in winter food-gathering, and described a single observation of redpolls feeding in tunnels formed by snow-buried weeds. Clement (1968), however, felt this provided "no evidence that the birds actually excavated these openings to get at food."

Both Palmer (1949) and Clement (1968) report an account of Common Redpolls seen bathing in wet snow on a Mount Desert Island, Maine, roof by Mrs. E. A. Anthony:

The birds would take a series of vigorous hops to gain momentum, then plunge and burrow head first until almost out of sight. They fluttered their wings like birds taking a water bath. They would then remain quiet for several minutes, and emerge, flutter their wings, throw snow over themselves with their bills, and hop to another place to repeat the bathing. When a bird came out of a hole, another would dash into it, the first going into another hole or making a new one. About 50 birds kept this up for an hour and left the snow on the roof only after they had honeycombed it with holes.

Furness observed snow bathing on the mornings of 3, 4, and 6 Feb. Each time there was recently fallen powder snow on the roof. The behavior followed the classic form of passerine dust or water bathing, with fluttering wings and preen-

ing, but with a minimum of actual excavation in the snow. Pock-marks resulted, but not the deeper burrows produced several days later during the 9 Feb excavations.

On the morning of 1 March, however, Furness observed almost continuous instances of snow bathing excavations between 8:00 a.m. and 12:30 p.m., again at his home near Moriah Center. This was not the burrowing and sitting witnessed 9 Feb, but clearly bathing activity. Of a total flock of about 150 redpolls, a dozen to two dozen at a time would actually excavate in the new-fallen snow by flapping their wings exactly as in normal dust bathing, followed by preening, then more fluttering and preening. After up to a minute and a half of this activity, the redpolls would fly down to feed, and other individuals would fly up to the garage roof to take their turns snow bathing. The purpose of the excavation was to shower their bodies with snow; in some instances they would peck at the roof of the burrow to shower snow over themselves while fluttering their wings. The snow on the garage roof was ultimately riddled with about 50-60 holes.

Although the 9 Feb incident may provide a first record of redpolls excavating snow burrows for shelter, the 1 Mar episode of snow bathing is strikingly similar to that previously reported from Maine. Following a warming trend that began on 6 Mar, the rooftop snow began to melt and no further excavations were noted before Common Redpoll numbers began to decline in April. No similar behavior has been previously described from the Adirondack-Champlain region, or apparently from New York State.

Literature Cited

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