

SOLITARY VIREO BREEDING BEHAVIOUR

ROSS BARCLAY, Department of Biology, University of Saskatchewan, Saskatoon, Saskatchewan

It is always interesting to discover a bird's nest, particularly when the species is one not previously encountered and when detailed observations are possible. Such an opportunity presented itself on June 19, 1966, at the University of Saskatchewan Arts Camp at Emma Lake, Saskatchewan, when a Solitary Vireo nest, 12 m from the Biology Laboratory was brought to my attention by Dr. Maureen Rever. A remarkable characteristic of this bird is its tolerance of human beings. When closely approached on the nest, the female showed little alarm, making observation a relatively simple matter. (A second active nest was located within the Emma Lake Arts Camp. It was almost directly on a path. Few observations were made at this site, however, because the eggs disappeared early in incubation, probably the work of a predator.)

The Solitary Vireo breeds in Saskatchewan from Prince Albert to the northeast corner of the province.² Farley Mowat stated that "a single bird was collected July 9, 1939, in our aspen grove" at Emma Lake.⁴ The preferred habitat of Solitary Vireo is open mixed coniferous and deciduous forests. These nests were found in a mixture of trembling aspen, white birch and spruce. In both cases the nests were located within 15 m of a clearing, showing their tolerance to light. Nevertheless, it is not a sociable bird; it seldom nests in shade trees of parks or in city parks, preferring the interior of forests.

On several occasions I was able to photograph the nests from as close as 1 m without apparently frightening the incubating female. Later, the nest was inspected more closely and the eggs measured. The female did not leave the nest until I ap-



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proached to within a meter of her. Even then she remained within two or three m of the nest, sitting on a branch, repeating a nasal, scolding squawk. Several seconds after leaving the nest she was joined by the male, who gave the same incessant alarm cry. This continued until I had left the vicinity of the nest; no attacks were made on me. After I had retreated further the parents fell silent and the female flew to a twig several centimeters above the nest. After a few moments she dropped to the edge of

the nest and settled upon the eggs as calmly as if nothing had happened.

The nest itself, like those of other vireos, is a low hanging basket. One was constructed in the fork of a twig on a white birch three m above the ground. The other was hung at approximately the same height in the fork of a twig on a Black-fruited Chokecherry tree.

Both nests consisted of an inner cup lined with fine grasses. This had a diameter of about 6.2 cm and a depth of 5 cm. The outer shell was constructed primarily of small strips of the thin outer bark of white birch, plus small quantities of a cotton-like substance as well as pieces of foliose lichen.

The Solitary Vireo normally lays from three to five eggs.¹ Usually there are four, which was the number in the nest which had not been predated. The eggs were ovate in shape, but somewhat pointed. They were nearly pure white, with tiny chocolate brown spots, few in number and more densely distributed near the large end. Using a micrometer scale, the measurements of the four eggs, in millimeters, were as follows: 20.8 by 14.7, 21.2 by 14.8, 20.5 by 14.5, and 20.6 by 14.6. Each egg was larger than the average given for the species in the eastern United States — 19.5 x 14.4.³

No definite information regarding the period of incubation appears to be available. However, it is believed to be from 11-14 days.^{3,5} Unfortunately, these two nests were found some time after the eggs had been laid, and I was unable to be present when they hatched, so the incubation period could not be determined.

Both parents shared incubation. In most cases when the nest was observed, the female was incubating, indicating that she performed the greater share of the incubation. When one of the parents did leave the nest, presumably to feed, the

other took over the task of incubation. This switch was observed twice. In the first case, the male approached and flew from branch to branch, landing at each perch for several seconds. After a few minutes he flew to the nest and landed on the edge of the cup whereupon the female left and flew out of sight. The male then began to incubate.

In the second case the male was observed incubating. The female returned to the nest, landed on a branch near the nest, and the male then left the nest and went to a nearby branch. He perched there for a few seconds and then flew away. The female waited about one minute before entering the nest.

One can easily see that the Solitary Vireo is an interesting little bird for study. Any observation is bound to yield interesting new information about its ecology. Because of the reclusive nature of this bird and the fact that it is not abundant in Saskatchewan, I should avail himself of every opportunity to study the Solitary Vireo.

¹BENT, A. C. 1950. Life histories of North American wagtails, shrikes, vireos and their allies. D. C. Heath Publications, New York. 411 pp.

²Godfrey, W. E. 1966. The birds of Canada. Queen's Printer, Ottawa, 428 pp.

³Harrison, H. H. 1975. A field guide to bird nests. Houghton, Mifflin, Boston. 200 pp.

⁴MOWAT, F. M. 1947. Notes on the birds of Emma Lake, Saskatchewan. Field-Nat. 61:105-115.

⁵REILLY, E. M., Jr. 1968. The Audubon illustrated handbook of American birds. McGraw-Hill, New York. 524 pp.