

A FURTHER STUDY OF THE HOME LIFE OF THE
NORTHERN PARULA WARBLER (COMP-
SOTHTLYPIS AMERICANA USNEAE) 1925.¹

BY HENRY MOUSLEY.

It would seem as though the fates were against me, for this, the third attempt to complete the study of the home life of this charming little Warbler, has again been only partially successful, the same as was the case with the previous ones in July 1921, and May 1924, both of which have been recorded in the April numbers of 'The Auk' for 1924, and 1926. However, the present study made in May 1925, has been full of interesting incidents, although, like the previous one in May 1924, it deals only with the construction of the nest, the birds apparently forsaking it after completion, owing, no doubt, to three days continuous rain.

As, with the previous nests, this one was located at Hatley, Que. in the same wood, and within eighty yards of that of 1924. It was discovered on May 22, by having watched and followed up the movements of the male—on the two preceding days—who, by repeatedly coming back to one particular little birch tree in a rather open spot, eventually led to my discovery of the nest, twenty-nine feet up in the drooping bough of a dead balsam fir. The nesting tree was just eleven yards from a little birch, which, with a small willow discovered later on, formed the two principle "singing trees" of the male. As regards the nest, there seemed to be no question of its having been commenced on the very day (May 22) I discovered it. In most respects, it resembled the one of 1924, with the exception, that the long streamer of usnea which hung on the left hand side of it, was eventually incorporated into the general structure, whereas, in the former case, this was not so, as explained, and shown in the plate accompanying my article in 'The Auk' for April 1926. Few people realize the lightness of these lovely little nests, the one just referred to in 'The Auk,' weighing 338 grains only, or .77 of an ounce, including the twigs

¹ Read before the American Ornithologists' Union, Ottawa, October 13, 1926.

and bunch of usnea to which it was attached, whilst, the present one, weighed 100 grains only, or .23 of an ounce! It was beautifully symmetrical, being composed entirely of usnea, with a few very fine grass stems to strengthen it, the lining consisting of some black hair-like rootlets, with two bits of plant down, the dimensions being as follows viz: Outside diameter 3.25, inside 1.75 inches; outside depth 2.50, inside 1.75 inches. The female after selecting some of the longest threads of the hanging bunch of usnea, attached them to a little twig a few inches off, following this up with that curious process—inherent—of moulding the nest, which in this case, was really an acrobatic performance, there being of course no apparent nest to mould, just a few strands, through which the bird's tail and wings protruded. The tenacity of a thread of usnea lichen must be immense for these few to have supported the weight of the bird at all, especially, as it turned round and round in the moulding process.

During the time I was at the nest from 8:15 A.M. to 11 A.M., the female brought sixteen loads of building material, whilst the male sang twenty-five times. On one occasion, he entered the nest, giving vent to a long twitter of satisfaction, and twice drove off males of other species who had ventured too near his preserves, one being a male Black and White Warbler (*Mniotilta varia*), and the other a Blackburnian Warbler (*Dendroica fusca*). On the following day May 23, it was very cold, and neither of the birds was seen during the time I was at the nest from 1:30 P.M. to 3 P.M. The next day I visited the site in the morning, and during the three hours I spent with the birds, the female brought twenty-seven loads of material, whilst, the male sang on twenty-seven occasions, the rate never exceeding five times to the minute. On one occasion, he fed his partner whilst she was at the nest, and again drove off the male Blackburnian Warbler, who, I think, had a nest somewhere in the immediate neighborhood. Once again, he entered the nest, bringing no material, however, but turned round in it, and then left and sang. The following day, the 25th, nothing very interesting took place, except, that on one occasion the male—who had arrived with his partner—perched below the nest, whilst she was in it.

The next day, however, the 26th, things were very brisk, the

female bringing thirty-one loads of material, whilst, the exuberance of the male caused him to sing on 169 occasions, on one of which, having entered the nest, he so far forgot himself on coming out, as to actually sing on a little bough, just under it. Once again, towards the end of my three hours vigil, he entered the nest, but on this occasion he only turned round in it—and then went off. Nothing unusual occurred the following day, although the male on two occasions, went with his partner to the nest, and on another, entered it, but did not repeat his blunder of the day before. The female chipped twenty times on arriving at, and seventeen times on leaving the nest, this inherent habit being more noticeable when the young are hatched, than in the earlier stages of the home life, nevertheless, the force of habit “will out” at all times—apparently. The two following days, the 28th, and 29th, were very busy ones, more especially for the female, as she brought sixty-nine loads of material in the two and one-half hours I was at the nest in the mornings, or at the rate of one load about every two minutes.

On one occasion, she preened her feathers whilst perched on a little twig just under the nest. The male sang on sixty occasions, the song in a few cases only, being repeated six times to the minute, which seems unusual with this species, the number more often not exceeding five to the minute. In the case of the Yellow Warbler (*Dendroica aestiva aestiva*) mentioned in ‘The Auk,’ for April 1926—who sang one thousand eight hundred times in the twenty-nine hours I was at the nest—he never repeated the song more than six times to the minute, but this was of very common occurrence. In the afternoon of the 29th, the male was again very busy, singing no less than twenty times out of forty-eight from a little willow, from which the nest could not be seen, nor could I see him either, although, I had often heard him in that direction before. This aroused my curiosity, and I determined to find out the reason for his partiality for this little tree, which, next to the birch, formed his principal “singing tree.” The cause was immediately apparent, the supply of little flies on the catkins of this willow. It reminded me of the case of the male Redstart (*Setophaga ruticilla*) described in ‘The Auk,’ for April 1924, who had two principal “singing trees,” one a beech, four yards from the nest, the other

a hemlock, ten yards away, in which latter, he seemed to gather most of his food, not only for himself, but his brood also. Probably, the male Parula, in like fashion, would have gathered most of his food for his family, from the little willow. On the 30th, he was again in exuberant spirits, for he sang on eighty-three occasions, no doubt caused by the apparent drawing to a close of building operations.

As, on the 26th, he once again "gave the show away," by singing directly under the nest, after he had entered, and come out of it again. Certainly, as on the previous occasion, he rendered the song—once only. May the 31st, saw the completion of the nest, so far as I was able to judge, for out of the three hours I was at the site in the morning, the female only visited it once, and that, ten minutes after my arrival. In the afternoon, I did not see her at all, although, the male entered the nest once, and then sang in a nearby tree.

Up to this point, every thing had progressed favourably, and I could hardly imagine things going wrong for the third time. But so it was, for late in the afternoon of the above day, it commenced to rain heavily, and for the next three days it literally poured every morning, and was not much better in the afternoons, and I can only assume that this state of affairs was the cause of the birds abandoning their nest, for when I visited it again, on June 8, there were no eggs in it, and neither of the birds was anywhere about. Thus ended my third, and possibly my last opportunity—as I have now left Hatley—of again attempting a complete study of the home life of these interesting little Warblers.

As, in the case of my previous studies, I have prepared a table summarizing the principal happenings at this nest, from which it appears the male sang 549 times, and the female brought building material to the nest 206 times—during the twenty-four hours I spent with them—or at the rate of one load every 5.4 minutes, the male rendering no help, whatever, in this connection, except, by way of singing to encourage his mate. Comparing these figures with those of last year, I find the female in that case brought 221 loads to the nest in seventeen hours, or at the rate of one load every 4.6 minutes, whilst, the male sang 111 times only, a great falling off as compared with the activities of this one. The

TABLE OF SUMMARIES.

<i>Species</i>	<i>Period of Observation</i>	<i>Hours</i>	<i>Times Male Sang</i>	<i>Loads of Nesting material brought by female</i>	<i>Rate of delivery of nesting material in minutes, once in</i>	<i>Remarks.</i>
Northern Parula Warbler	May 22-31	24	549	206	5.4	Female chipped 49 times on arrival at, and 26 on departure from nest.

chipping of the female on arrival at, and departure from the nest was also less, sixteen times for the former, and six for the latter, as against forty-nine, and twenty-six respectively, for this year. The male sang once in the nesting tree last year, and twice in the present instance, a total of three times only out of the 660 that the song was rendered, which goes to prove how very uncommon the event is.

In conclusion, my best thanks are due to Mr. P. A. Taverner, who has made it possible for me to obtain the beautiful photographs of this, and the other nests appearing in 'The Auk,' all of which have been taken by the Geological Survey, Ottawa.

469 Harvard Ave., Montreal.