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Minnesota: Fort Snelling.

Nebraska: Omaha; Douglas County; Florence.

New York: Suspension Bridge; Highland Falls; Canandaigua; Hunter.

Ohio: Circleville.

Oklahoma: Ponca Agency; Savanna.

Ontaric: Lorne Park (Peel County); Lake of Bays.

Pennsylvania: Carlisle; Watsontown; Philadelphia; Chester County;

Erie; Newton Hamilton; Beaver; Leasuresville.

Rhode Island: Fort Adams.

Texas: De Leon.

Virginia: Falls Church (Fairfax County); Gainesville.

Wisconsin: Kenosha.

THE BREEDING OF THE BLACK-THROATED BLUE WARBLER AT HATLEY, STANSTEAD COUNTY, QUEBEC 1916.1

BY H. MOUSLEY.

In 'The Auk' for January and April, 1916 (Vol. XXXIII, pp. 57–73, 168–186) I have given the status up to the fall of 1915 of the seventeen different species of warblers I had so far discovered here. Of these, four are transients, and the remaining thirteen summer visitants, out of which latter number the nests and eggs of ten had actually been found, thus leaving only three to be accounted for viz.: The Black-throated Blue (Dendroica cærulescens), the Black-throated Green (Dendroica virens) and the Black-burnian (Dendroica fusca). Unfortunately I was prevented from doing any field work from May 10 to June 14, so that I missed the spring migration entirely, with the exception that on May 6, I saw a pair of Yellow Palm Warblers (Dendroica palmarum hypochrysea) on the little seventy-five acre farm, which in 1912 had given me my first and only record until the one just mentioned.

¹ Abstract of paper read before the Nuttall Ornithological Club, Oct. 2, 1916, by Dr. Chas. W. Townsend, for the author.

The finding of most warblers' nests is not an easy matter at any time, but one is generally aided to some extent if the birds can be watched at migration time, as some indication is then often gathered of where a certain species is likely to nest by always finding it near or about the same spot in the woods. This missing, then, of the spring migration as will be readily understood was a great drawback, but fortunately I had found the three species already named during the summer of 1915, frequenting a large wood not far from my house, which consisted for the most part of a mixture of such trees as maple, beech, fir, pine and hemlock with nice open spaces in many parts where young maple saplings and others had obtained a height varying from one to six feet or more. It was to this wood therefore that I repaired on June 14 with the full determination of thoroughly exploring the ground where I had located a pair of Black-throated Blue Warblers on June 23, 1915, but had failed to find any trace of their nest. Hardly had I reached the spot and started to search, when in the forks of a little maple sapling just three feet above the ground (and only fifty yards from the spoti where I had flushed the female in the previous year) I came upon a beautiful nest, which was different from any warbler's I had ever found before, and which from its construction I took to be the one I was in search of.

It was not what one might describe as entirely typical of the species, for the outside construction lacked the rotten or pithy wood, which is so characteristic of these birds, but in other respects it conformed to standard requirements, as not only was it large and bulky, but the sides were thick walled, being composed for the upper part of woven cedar or grape vine bark, whilst the lower portion was of white birch bark, the lining consisting of slender, red, hair-like rootlets (exactly the same as used by the Magnolia here) and some hair.

The dimensions were as follows, viz: outside diameter three and a fourth inches, inside one and three-fourths inches; outside depth four and three-fourths inches, inside one and one-half inches; and at the time of finding was empty, but apparently quite finished. On visiting it the following day about eleven o'clock it contained one egg, and for the next three days (always before the above mentioned time) an extra one was laid until the full set of four was

complete. It can well be understood that this being the first record of the bird nesting here. I was very careful not to linger longer than necessary on each visit, and it was not until after the fourth egg had been laid, and the female had begun to incubate, that I was able to prove beyond a doubt that the nest and set belonged to Dendroica carulescens, as on no occasion had either of the birds put in an appearance on any of my visits. However I had now no difficulty in getting many a good look at the female as after being flushed from the nest she seemed in no way concerned and usually remained in the vicinity for some time preening her feathers and flitting about. The male never once put in an appearance nor could I find or hear him singing anywhere in the wood. After securing this nest and set I decided to keep a careful watch, and see if I could catch the birds at their second venture, but it was not until June 28, that I came across either of them, and this time it was the male (or perhaps a male) who was singing in the tree tops some 125 yards south of the site of the nest found on the fourteenth. I visited this new locality on several occasions but could find no trace of the female or a nest, and had almost given up all hope, when by a lucky chance I came across a nest on July 10. This was quite close to a little footpath along which I was walking (the previous one having also been within seven yards of a logging road) and as in the case of the first one was in the fork of a little maple sapling, but only one foot three inches above the ground instead of three feet, and was ninety yards east of the site of the first nest, and one hundred vards from the spot where I had heard the male singing on June 28.

On flushing the female I naturally concluded I had found the second nest of the only pair of birds I considered to be frequenting the wood, but on examining it, and the set of four eggs, I found both differed in a marked degree from those of the first, as not only was the nest (which I have since presented in situ to the Victoria Memorial Museum at Ottawa) a thoroughly typical one, being composed almost entirely of small pieces of rotten or pithy wood, but it was also much less in depth, the dimensions being; outside diameter three and one-eighth inches, inside one and seven-eighths inches; outside depth two and one-half inches, inside one and one-half inches; the pithy wood being held together by fibrous materials and spiders silk, no birch or cedar bark being present, and the inside

lining consisted of fine black rootlets and black and white hairs. the walls also not being so thick as in the previous one. tion to this difference in the nests the two sets of eggs were not at all alike, the first one being rather pointed and minutely spotted size $.70 \times .51$, whilst the second one was more obtuse and boldly spotted size $.66 \times .50$. The female on being flushed behaved exactly in the same manner as before dropping to the ground and when some little distance away from the nest rising above the underbrush into the lower branches of the adjacent trees, where she preened her feathers and flitted about most unconcernedly, in marked contrast to the behavior of the Redstart, Myrtle, Magnolia and Chestnut-sided Warblers, all of whom show great concern when flushed from their nests after incubation has been in progress a few days, which was the case in the above instance. As regards the male he behaved as before not putting in an appearance, although on the day of finding the nest I located one (presumably the male of this pair) singing in the tree tops some two hundred and fifty yards away. Certainly in my experience the behavior of the male of this species is not very complimentary, but I have to write as I found him.

After locating this second nest at such a late date, and apparently belonging to another pair of birds. I made renewed efforts to try and find a third one, but without success, although on August 1 I found a female feeding a young bird just able to fly, at a spot some seventy-five yards north of the first nest, and on this occasion the male put in an appearance for a brief period only, but made no effort to feed the young one. Probably these were the advance guard of the fall migration and have no bearing on the matter, in which case it is of course possible that the two nests and sets of eggs although differing so greatly may have belonged to the same pair of birds, in favor of which my inability to find a third nest and the unusual behavior of the male in keeping out of the way in both instances would seem to point. As regards the Black-throated Green Warbler I found the parent birds feeding young on the ground on June 28, and also located two empty nests, thus definitely adding it to the breeding list, so that there only remains the Blackburnian Warbler of the summer visitants whose nest, eggs or young I have so far failed to find. In conclusion I may mention that I

have been fortunate in adding the rare Cape May Warbler to my list, as well as the Nashville and Water-Thrush (noveboracensis) having obtained examples of all three towards the end of August, so that my total now stands at twenty species of these interesting little birds that I have found here so far.

NOTES ON NORTH AMERICAN BIRDS.

I.

BY HARRY C. OBERHOLSER.

This is the first of a series of articles on the status, relationships, and nomenclature of various North American birds. These notes have been gathered during the course of many years of work, largely on the collections of the Biological Survey and of the United States National Museum, and in the identification of specimens for other institutions and for individuals. They are now presented for the benefit of ornithologists interested in the birds of this region.

Cepphus snowi Stejneger.

A specimen of this species said to have been taken on the Kenai River, Alaska, on October 7, 1906, is recorded by Dr. Anton Reichenow in Niedieck's "Kreuzfahrten im Beringmeer," 1907, p. 250. A recent letter from Dr. Reichenow says that this specimen reached the Berlin Museum in too poor a condition to be preserved. He says, moreover, that while the identification of the specimen is correct, there is considerable doubt about the proper labeling of the specimens in the collection made by Mr. Niedieck. In view of this likelihood that the labels were in some manner transposed, it seems quite inadvisable to add the species to the North American list on the basis of this record.