

RING-NECKED DUCK BREEDING IN EASTERN
NORTH AMERICA

BY HOWARD L. MENDALL

DURING the summer of 1937, the writer was detailed to initiate a water-fowl survey of the State of Maine, as one of the projects of the Maine Co-operative Wildlife Station, established through the cooperation of the University of Maine, State Department of Inland Fisheries and Game, U. S. Biological Survey, and American Wildlife Institute. Although the studies are to be continued for several years, distributional data have been secured on the Ring-necked Duck, *Nyroca collaris*, that may be of sufficient interest to warrant a paper at this time. For unpublished data, acknowledgment is hereby made to the correspondents mentioned in this paper, the National Parks of Canada, the New Brunswick Department of Lands and Mines, and the U. S. Biological Survey.

Prior to 1925, the eastern breeding limits of the Ring-necked Duck appear to have been southwestern Ontario, northeastern Minnesota, and eastern Wisconsin. One exception, the breeding of the duck in the St. Croix valley, was recorded about three-fourths of a century ago by Boardman (Proc. Boston Soc. Nat. Hist., 9: 122-132, 1862). It is uncertain, however, whether this occurrence was on the Maine side of the St. Croix River or whether it was a New Brunswick record. That the species has increased in abundance in eastern North America during migrations of the past twelve or fifteen years is a fact well known to field observers. Numerous papers or notes have appeared in "The Auk", recording the birds in localities where they had hitherto been considered rare or lacking. A few such papers, relating to the Atlantic coastal States, are the following: for Maine, Chamberlain (Auk, 52: 316, 1935); for Massachusetts, Pell (Auk, 53: 323, 1936); for New Jersey, Griscom and Johnson (Auk, 41: 339, 1924); for Delaware, Brown (Auk, 51: 227-228, 1934); for North Carolina, McAtee (Auk, 43: 251-252, 1926) and Wallace (Auk, 53: 227, 1936). Additional data of interest have been obtained through correspondence with other observers. Concerning the species in New York, Dr. Arthur A. Allen of Cornell University, writes: "Forty or fifty years ago it was reported as being a fairly regular migrant through the Finger Lakes region. Between 1907 and 1925, however, it was relatively scarce, but during the last dozen years the bird has been quite regular, occurring in considerable numbers on Cayuga Lake [central New York],"

Ludlow Griscom of the Museum of Comparative Zoölogy, Cambridge, says, in part: "The facts are that from the beginning of the period of historic records down to the year 1920 the Ring-necked Duck was a purely

accidental visitor in the Atlantic States north of southern Virginia. . . . At the present time the Ring-necked Duck is a regular spring and fall migrant throughout the northeastern Atlantic States, and in good years it will occur in some numbers, small flocks from ten to twenty-five, or even forty, birds being regularly recorded every fall and slightly smaller numbers in the spring. In mild winters, like the past one [1936-37], for instance, the Ring-necked Duck winters regularly as far north as Boston, and is, of course, of more frequent occurrence as we proceed southward at that season. . . . There is no doubt, for instance, but what ducks in North America have been steadily and rapidly decreasing in the last ten years as a whole, and there is also no doubt that in its original breeding area and its original normal wintering area the Ring-necked Duck has decreased more than 50%. . . . Under these circumstances, therefore, the last thing that one would expect would be to have this species become a common and regular transient in a region where it has been nothing but an accidental visitant for the preceding 75 years, and yet this is exactly what has taken place."

Dr. Harrison F. Lewis, Chief Federal Migratory Bird Officer for Ontario and Quebec, states that the species is now one of the commonest of the ducks hunted near Ottawa, and points out the possibility that it may be breeding in the forested regions north and northwest of that city.

Definite evidence of breeding east of the accepted range apparently was first obtained by Pirnie (Michigan Waterfowl Management, Lansing, p. 26, 1935), who comments on the noticeable increase in the species in northern Michigan and says that it was found nesting in the Upper Peninsula in 1928 and in 1930. The breeding season of 1936 brought at least two recorded instances of nesting Ring-necked Ducks in eastern United States, while observations made in 1937 uncovered some entirely unexpected concentrations of the birds in northern Maine and in New Brunswick. During July, 1936, Todd (Auk, 53: 440, 1936) obtained young of this species at Pymatuning Lake in the northwestern part of Pennsylvania. Mated pairs had been seen here the previous May. Swanson (Auk, 54: 382-383, 1937), together with Messrs. C. M. Aldous and F. M. Uhler of the U. S. Biological Survey, located a female with a brood on Grassy Pond, Piscataquis County, Maine, on August 6, 1936. Two weeks later Messrs. Fred Roberts, C. M. Aldous, and the present writer secured two of the young to verify the identification. In late April, 1937, Ralph Palmer, a student at the University of Maine, observed a pair of the birds on the Stillwater River in Oldtown, Maine, and shot the male, which is now in the University of Maine collection.

The following 1937 data were secured by the writer in the extreme northern part of Maine, in Aroostook County: on August 12, an adult male was seen at Cross Lake; on August 20, an adult female was studied at close range at

Eagle Lake. Although she acted as if young were near, a search of the marshes failed to reveal any ducklings. On August 21, nineteen individuals, including two broods, were seen at Mud Lake. One of the young, less than three weeks of age, was secured. A duck, believed to be an adult female of this species, was observed at St. Froid Lake on the same day. On August 23, at least fifty-three individuals, including six distinct broods, were found in the marshes of Portage Lake. Sizes of the various broods ranged from five to eight young, none of which was able to fly.

One breeding record was obtained by the writer in Washington County, the easternmost part of Maine. On August 26, two broods were discovered on the East River, near Crawford Lake. An interesting note in this connection was the fact that one of the broods was made up of ducklings less than two weeks old, despite the lateness of the season. One of the young was taken.

There were several breeding records for New Brunswick in 1937. During a survey made in the spring, Mr. Harold S. Peters, of the U. S. Biological Survey, observed the species in appreciable numbers. According to his unpublished notes, three birds were observed on May 19, between St. John and Moncton; twenty were found on June 12, between Fredericton and Cambridge; and twelve were observed on June 14, at Grand Lake. Peters comments, "Some of these had broods of young, mainly in the Grand Lake area." Lt.-Col. H. H. Ritchie, Chief Game Warden for the Province of New Brunswick, accompanied Peters, and writes that these data constitute his first knowledge of the species as a resident of New Brunswick.

Mr. Robie Tufts, Chief Federal Migratory Bird Officer for the Maritime Provinces, forwarded a copy of his records relating to the Ring-necked Duck, and among these data is the following: "*June 9 & 10, 1937.* Mr. James Catt informed me that at Priest's Pond, Carleton County [New Brunswick], he saw no less than ten pairs of these birds and stated that they were unquestionably breeding."

From the foregoing paragraphs, it would seem apparent that the eastward extension of the breeding range of the Ring-necked Duck is of considerable importance. During 1937, Peters covered only a limited portion of New Brunswick, while the writer's work in Maine was restricted to Aroostook County and parts of northern Piscataquis and eastern Washington Counties. It seems likely that further studies in Maine and the Maritime Provinces will bring to light additional breeding areas. How long the species has been nesting in this section is, of course, mere speculation. Northern Maine is relatively unimportant from the standpoint of waterfowl shooting, and the presence of Ring-necked Ducks in summer would not arouse the interest that would be occasioned in an area where sportsmen carefully check their local waterfowl populations. Many inquiries were made of game wardens

and local residents as to the past status of the bird, but very few of these people could give any definite information, although some had been aware that "a new kind of duck was in their lakes." Two wardens, whose reliability and powers of observation are good, expressed the belief that the species has nested in Aroostook County for at least five or six years. In view of the numbers of individuals encountered at several bodies of water—particularly Portage Lake—it is quite probable that the wardens are correct in their recollections.

Maine Cooperative Wildlife Station

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