## THE VALIDITY OF THE RED-LEGGED SUBSPECIES OF BLACK DUCK.<sup>1</sup>

BY CHARLES W. TOWNSEND, M. D.

In April, 1902, Mr. William Brewster described a northern race of the Black Duck,—then known as Anas obscura,—under the name of Anas obscura rubripes or the Red-legged Black Duck the chief characteristics of which were the large size, the coral red legs, the yellow bill, the coarse spotting of the entire throat and the grayish edging of the feathers of the crown and nape. form was well known to occur in winter on the New England coast, and Mr. Brewster referred four of the breeding Black Ducks which he had examined to this new race. These specimens came from northern Labrador and the Hudson Bay region. He referred breeding specimens from Newfoundland to the older race, but he admitted that he had "none from any locality south of the Gulf of St. Lawrence which were taken at the height of the breeding season." He inferred, however, that these belonged to the smaller race with brown or slightly reddish legs, dark or olive green bills, buffy and immaculate, or but slightly spotted throats, and dark crowns and napes.

It should be noted here that not only the color of the legs, but several other factors correlated therewith distinguish these two races. I wish to emphasize this fact for ornithologists are apt to speak as if the color of the legs was the only distinguishing feature.

In April, 1905, in "The Birds of Essex County," I gave several facts which suggested that rubripes might be the adult male of obscura, and "assuming for the sake of argument" that this was the case, I pointed out very similar facts in the case of the Redbreasted Merganser where the winter birds in New England are largely old males, while the females and young go south. In conclusion I said: "These observations are of course insufficient for definite deductions, and are offered merely as a contribution

<sup>&</sup>lt;sup>1</sup> Read at the Twenty-ninth Stated Meeting of the American Ornithologists' Union, November 14, 1911.

to the study of the subject. I have made no observations on the adult male breeding bird in summer in Essex County, and as far as I know this has never been done. Its value in the discussion is obvious." I should have added that as the female often assumes masculine characters with age, it is possible that this fact may explain the existence of female *rubripes*. From the data then at hand, I believe that my position was a logical one, and that one could argue both for and against the validity of *rubripes* as a subspecies. The proofs were still lacking.

In July, 1908, the fourteenth supplement of the A. O. U. Checklist was published in which the name *Anas obscura* was changed to *Anas rubripes*, and the following statement made: "The name *Anas obscura* Gmelin, 1788, proves to be preoccupied by *Anas obscura* Pontoppidan, 1763, for an old world species, and no other name being available, *rubripes* of Brewster is adopted as a substitute. (Richmond, Ms.) There is some question as to the validity of the form recognized as No. 133a, [the Red-legged subspecies of Brewster] which, by the above action, is now cancelled."

Notwithstanding this statement of skepticism as to the validity of the two races, the next supplement, published in July, 1909, admits its belief in them by recognizing *Anas rubripes tristis* or Black Duck on the basis of a paper on the subject by Mr. Brewster in the previous April, in which, however, no new facts are adduced.

In October, 1909, Dr. Jonathan Dwight maintained that the differences between the supposed races were "exactly the ones that distinguish old birds from young whether they occur in the United States or in Canada" and he added that his evidence on this point was "conclusive."

To this Mr. Brewster replied in July, 1910, and showed that none of Dr. Dwight's evidence was conclusive, and that the only breeding bird examined by Dr. Dwight, shot on Long Island, might easily have come originally from the Bronx or Central Park.

Thus by the whirliging of time and the A. O. U., the Black Duck, so long and familiarly known as *Anas obscura*, becomes a sad subspecies of the upstart Red-leg, and even then its position is disputed, while the erstwhile Red-legged subspecies is put on a secure specific basis. One is forcibly reminded of the behavior of the intruding Cow-bird. The title of this paper should therefore have been

"The validity of the Black Duck," but as that seemed almost insulting to our old friend *obscura*, I have adopted the present title which, although perhaps not entirely correct, will, I believe, readily be understood.

The only way definitely to decide this question is by the observation of native New England birds during a period of several years from their hatching out, or by the observation of breeding birds. Both of these observations I have been fortunate enough to make, for I have watched two pairs of Black Ducks, caught in the down in Massachusetts, from June, 1909, until June, 1911, when one pair had nested. Careful notes of these birds were taken from time to time, and, as far as this experiment goes, it certainly bears out Mr. Brewster's statements, for the breeding birds in their third spring were typical *tristis*.

The birds were captured in the down in Hudson, Massachusetts, on July 15, 1909, and came into the possession of Mr. John Golding of South Sudbury, to whom I am much indebted for his interest and assistance. There were originally five birds, three males and two females. These I labelled on October 2, 1909, by fastening numbered aluminum bands on their legs, and I noted the colors and markings of each. They were kept in a small enclosure out of doors, in which was a pool of water. All thrived but one male that soon died. I visited them again in January, March, July and November, 1910, and in June, 1911. At the last date one pair had died, and the other pair had been transferred to Medfield where I saw them. This pair was given considerable freedom in an enclosure in a natural meadow in which were pools of water, and they had nested. At each visit the birds were caught separately and examined critically in the hand, and the colors of bill and feet and the markings noted down without reference to any preceding notes.

When four months old one of the females had a pure buffy throat, while the other female's throat had a few scattered spots on it. All three males had more or less fine spotting on a buffy ground. The bills of the females were dark greenish black, their tarsi brownish, while the bills of the males tended more to greenish yellow and their legs to orange. The next spring the bills of the males were slightly lighter in color, but by no means yellow, and

their tarsi were possibly a little brighter orange. A study of the plumage showed, however, no suggestion of either an eclipse or a nuptial dress. In the third spring the appearance was essentially the same. The surviving male had a dark crown and nape, a buffy throat, fairly well, but not thickly spotted, a greenish yellow bill and orange feet,— not by any means the coral red feet of rubripes. The female had a dark olive-green bill, dirty yellow tarsi and an unspotted buffy throat. Their size was that of the smaller race.

Wood Ducks kept in the same enclosures changed from juvenal to adult plumage, and from eclipse to nuptial plumage, so there seems no reason why Black Ducks should not have changed if it was normal for them to do so. The fact that a pair bred showed they were living under very normal conditions.

That there are distinct racial differences between rubripes and tristis as originally maintained by Mr. Brewster seems to be thoroughly borne out by these observations carried on during three successive springs under very natural conditions. Yet it might be maintained that the period of these observations was too short, or that the confinement interfered with natural conditions. Be that as it may, these observations are offered for what they are worth as a contribution to the study of the subject.

## BIRDS IN THE MARKETS OF SOUTHERN EUROPE.

BY LOUIS B. BISHOP, M.D.

The year from August, 1910, to July last was spent by Mrs. Bishop and myself in travel in western Europe and northern Africa. Ornithology was not our aim, and no actual field-work was done anywhere. But I kept my eyes and ears open for birds during all parts of our trip as opportunity permitted, and it has seemed to me that what I noticed might be of some interest to the members of the Union in view of the remarkable sentiment for bird protection that has arisen in our country in the last few years.