

112. *Hylocichla guttata pallasi*. HERMIT THRUSH.— An uncommon transient, arriving as early as March 2. A few may winter.

113. *Planesticus migratorius*. ROBIN.— A common summer resident occasionally wintering in some numbers. They appear in large flocks about the middle of February.

114. *Sialia sialis*. BLUEBIRD.— A common resident, more abundant in March than at other times.

THE COURTSHIPS OF GOLDEN-EYE AND EIDER DUCKS.¹

BY CHARLES W. TOWNSEND, M. D.

THE intelligence shown by Golden-eyes or Whistlers (*Clangula clangula americana*) in frequenting bodies of water in or near the heart of cities where they are safe from persecution, renders easy a study of their habits, yet very little has been published on the somewhat remarkable courtship performances of this bird. I have watched these courtships at Ipswich and once at Barnstable, Massachusetts, but my most intimate studies have been made in the Back-bay Basin of the Charles River between Boston and Cambridge.

The spring is of course the time when courtship actions are most indulged in, and they begin on mild days in February and continue until the departure of the birds for the North in April. In the autumn months, however, it is not uncommon to see the same performance given by both the adult and young males, although but incompletely carried out in the latter case.

The courtship action varies considerably, but a typical and complete one may be described as follows: One or more males swim restlessly back and forth and around a female. The feathers of the cheeks and crest of the male are so erected that the head looks large and round, the neck correspondingly small. As he swims along the head is thrust out in front close to the water,

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occasionally dabbing at it. Suddenly he springs forward, elevating his breast, and at the same time he enters on the most typical and essential part of the performance. The neck is stretched straight up, and the bill, pointing to the zenith, is opened to emit a harsh, rasping double-note, *zzee-at*, vibratory and searching in character. The head is then quickly snapped back until the occiput touches the rump, whence it is brought forward again with a jerk to the normal position. As the head is returned to its place the bird often springs forward kicking the water in a spurt out behind, and displaying like a flash of flame the orange-colored legs.

This appears to be the complete performance, and the female, although usually passive, sometimes responds by protruding her head close to the water in front, and then bringing it up so that it also points to the zenith. Further than this, I have not seen her go. It must be remembered that even as late as March there are many young males whose plumage resembles that of the female, and although the males are of larger size, it is often difficult to distinguish them from the females. That the female does take part to this limited extent in the nuptial performance, I have, however, convinced myself.

There are many variations of this curious action. It may be curtailed so that the thrusting of the head up into the air alone remains, or it may be limited to the upward thrust of the head and the jerk to and from the rump. When the birds are at such a distance that the note cannot be heard it is impossible to say whether it is always emitted when the bill is opened, but I have observed birds close at hand go through the performance silently. I have also seen them thrust out the head in front in such a way as apparently to scoop up the water, and then elevate the head, the bill pointing straight up, but closed as if they were drinking the water, although I doubt if this is the case. Sometimes the head is held on the rump for several seconds before it is snapped into place.

At Barnstable on March 28, 1909, I saw a male Whistler, after ardently performing the courtship action near a female, fly off to a distance of about a hundred yards. The female swam rapidly after him with head stretched close to the water but lifted up vertically from time to time in the courting manner and she soon joined her mate who copulated with her.

The display of the brilliant orange-red tarsi and feet by the males is particularly interesting. These members in the females are pale yellow in color, and it may be supposed that the males have attained the more attractive orange-red as a result of sexual selection. They certainly make good use of this brilliant color in the courtship display, for the flash of the orange feet contrasting with the snowy flanks of the bird and the dark water is extremely effective and noticeable even at a considerable distance. In this connection it is interesting to note that the legs and feet of both male and female Barrow's Golden-eye (*Clangula islandica*) are alike pale yellow. I am not familiar with the courtship of this bird, and as far as I know it has never been described but I think it is reasonable to infer that the display of the legs as in the American Golden-eye is *not* a part of the performance. As the Barrow's Golden-eye lacks the peculiar localized swelling of the lower wind-pipe found in the American species, one might suppose that the peculiar musical part of the performance was also lacking in this western species. A study of the courtship of this very similar yet very different bird is much to be desired.

There is no more unusual and bizarre sight in the bird world than a dozen or more beautiful Golden-eye drakes crowding restlessly around a few demure little females and displaying these antics of head, neck and foot, while ever and anon their curious love-song pierces the air.

In his Labrador Journal of July 11, 1775, Cartwright says: "The water too, instead of pans of ice, was mottled over with ducks and drakes, cooing amorously; which brought to my remembrance, the pleasing melody of the stockdove," and he adds in a foot-note: "Eider-ducks make a cooing at this time of the year, not unlike the first note of the stockdove." During a recent trip to Labrador with Mr. Bent in May and June,¹ 1909, the study of the courtship of the Eider (*Somateria dresseri*) was one of my greatest interests. Everywhere we went among the rocky islands that line the coast, pairs and little bands of Eiders abounded. We found twenty nests on an island of a few acres, and, on a walk around Esquimaux Island, we must have seen at least 500 of these

¹ Auk, Vol. XXVII, 1910, pp. 1-18.

beautiful birds. They were usually in pairs, and, when flying, the female preceded, closely followed by the male. This was certainly the rule when the birds were flying about unaware of the presence of man, but, when disturbed or frightened by his presence, the male often flew first in his eagerness to get away from danger. Sometimes several pairs, apparently mated, would swim about together or rest on the rocks close to the water, while at other times one or two females would be surrounded by six or eight males that were crowding about them to win their favors.

The actual courtship of the Eider may be recognized from afar by the love-note of the male which can be expressed by the syllables *aah-ou* or *ah-ee-ou*, frequently repeated, and, while low and pleasing in tone, its volume is so great that it can be heard at a considerable distance over the water. On a calm day, when there were many Eiders about, the sound was almost constant. While the syllables *aah-ou* express very well the usual notes, there is much variation in tone from a low and gentle pleading, to a loud and confident assertion. In fact the tones vary much as do those of the human voice, and there is a very human quality in them, so much so that when alone on some solitary isle, I was not infrequently startled with the idea that there were men near at hand.

But the showy drake Eider does not depend on his voice alone, he displays his charms of dress to best advantage, and indulges in well-worn antics. It always seemed to me a pity that the magnificent black belly should disappear when the drake is swimming on the water, and the bird evidently shares my sentiments, for, during courtship, he frequently displays this black shield by rising up in front, so that at times in his eagerness he almost stands upon his tail. To further relieve his feelings he throws back his head, and occasionally flaps his wings. The movements of the head and neck are an important part of the courtship, and although there is considerable variation in the order and extent of the performance, a complete antic is somewhat as follows: The head is drawn rigidly down, the bill resting against the breast; the head is then raised up until the bill points vertically upwards, and at this time the bill may or may not be opened to emit the love-notes. Directly after this the head is occasionally jerked backwards a short distance still rigidly, and then returned to its normal position. All this the drake

does swimming near the duck, often facing her in his eagerness, while she floats about indifferently, or at times shows her interest and appreciation by facing him and throwing up her head a little in a gentle imitation of his forcefulness.

The courtship of the Eider, although less striking and elaborate, bears a strong family resemblance to that of the Golden-eye.

NOTES ON THE FLORIDA GALLINULE (*GALLINULA GALEATA*) IN PHILADELPHIA COUNTY, PA.

BY RICHARD F. MILLER.

It is a generally well known fact that our birds are slowly becoming fewer in the vicinity of our great cities, and on this account it is gratifying to record the discovery of a species inhabiting a restricted area near Philadelphia, which appeared here only recently, and is annually increasing in numbers. This is the Florida Gallinule, a large bird, whose existence as a summer resident in Southeastern Pennsylvania was unknown until 1904, when I found it breeding at Port Richmond, Philadelphia County, in a deep-water cattail marsh, and, as in all such discoveries, the detection of the birds was purely accidental.

Probably the reason it has escaped notice is on account of its secretive habits, and this alone has saved it from destruction by gunners. In my opinion, it has been overlooked chiefly because very few of our ornithologists are enthusiastic marsh nest hunters, and it seems to me that their ardor is deteriorating, as few of them are ambitious enough to don old clothes and wade through slimy mud and dirty water in quest of knowledge of marsh birds. This is probably the reason why there is so little known regarding the nidification and other habits of these birds.

A brief summary of our knowledge of the occurrence of the Florida Gallinule in this locality, prior to its discovery as a summer resident, will not be amiss. It appears not to have been very well known to the older ornithologists, who generally regarded it as a