

A FURTHER REVIEW OF THE AVIAN FAUNA OF CHESTER COUNTY, SOUTH CAROLINA.

BY LEVERETT M. LOOMIS.

(Continued from p. 59.)

186. *Scolecophagus cyanocephalus*. BREWER'S BLACKBIRD.—As has already been reported (Auk, Vol. IV, Jan., 1887, p. 76), three males and two females were captured Dec. 9 and 10, 1886. These birds were a part of a little troop of over a dozen that were then occupying a field in the outskirts of the town of Chester. The weather at the time was exceedingly rigorous—the opposite of that prevalent the past seasons. None have been observed since.

187. *Quiscalus quiscula æneus*. BRONZED GRACKLE.—At the outset of my ornithological study it so happened that the Crow Blackbirds taken were typical *quiscula*. As this was the form ascribed to the region by the books, a thorough investigation was not then deemed necessary. Subsequently the continued recurrence of birds essentially Western induced further inquiry, and the outcome was the discovery of *æneus* in November, 1887 (Auk, Vol. V, Jan., 1888, p. 113). Since then, whenever the opportunity has offered, the matter has been diligently followed up, and the result, though perhaps fortuitous, indicates a superiority of numbers for *æneus*. While Crow Blackbirds appear in the migrating seasons in vast droves, conveying an impression of extreme abundance, their dispersion is not general. A migration may be worked through without many being actually met with, although multitudes may be reported from adjoining neighborhoods. As at present advised, the Bronzed Grackles arrive about November 1, and during this month their southward migration is at its height. In the depth of winter occasional flocks are seen. Usually they are of small extent. In February the movement northward is in full progress, and it continues on through March. I have no knowledge of their breeding here.

189. *Calcarius pictus*. SMITH'S LONGSPUR.—Since the one was killed with a stone in December, 1880, a second specimen has been secured. This bird—an adult female—was shot Feb. 9, 1889. I have several times thought I have seen stray individuals passing overhead, but my acquaintance with this species is too limited to speak with certainty.

64. *Ammodramus savannarum passerinus*. GRASSHOPPER SPARROW.—While later observations show that this Sparrow occurs in every month of the year, yet it is not truly a 'permanent resident'. The birds of December and January are rare stragglers that have tarried behind after mild autumns, or have been tempted from the south, presumably from the lower part of the State, by the clemency of the weather. Ordinarily they appear in force about the beginning of the second week of April, although

adventurous scouts sometimes arrive as early as February. From the first coming of the bulk in April, onward into September, they are very common; afterwards there is a diminution in their forces, and toward the close of October only stragglers are to be found, which sometimes linger on into November. My dates for the first two winter months are Dec. 5, 14, 1885; Jan. 22, 1887; Dec. 25, 1889; Jan. 2, 1890. The song period lasts without interruption for about five months.

151. *Ammodramus leconteii*. LECONTE'S SPARROW. — The statement in my second list, that Leconte's Sparrows were common "winter residents," was fully borne out from the time of their discovery in November, 1881, to the close of the season of 1884-85. Since then they have been almost wholly absent. In the two winters immediately following not a single example rewarded my search. Individuals were captured March 2 and 3, 1888; Dec. 25, 1888; Dec. 19, 1889. Except one other, seen Dec. 25, 1889, these were all that fell under my observation during this interval. Explanation of their absence is to be sought, I think, not in their failure to journey southward, but in the transposition of the local centre of abundance to some other quarter not far remote. The weather can hardly be said to have exerted a governing influence over their movements, for the meteorological conditions in these years have varied greatly, and seasons have been not unlike those during the periods of greatest abundance. The presence of the two in March, 1888, is significant. The distribution of these Sparrows, hereabouts, appears to be very restricted. I have thus far discovered them only in a narrow stretch of country, about three miles in length, lying east of the town. The earliest record I have is Nov. 11, 1881, and the latest March 30, 1885. The average duration of their stay, so far as ascertained, in the years of abundance was above four months.

188. *Peucæa æstivalis bachmanii*. BACHMAN'S SPARROW. — It is only of recent years that I have become aware of the existence of this species in this locality. As so much time has been devoted of late to other fields during summer, I am not able to throw much light upon its abundance or upon the times of its arrival and departure. It appears, however, to be a regular visitant, coming soon in the spring and spending the breeding season. March 21, 1888, is the earliest date of its appearance I have memorandum of.

153. *Habia ludoviciana*. ROSE-BREADED GROSBEAK. — In fall Rose-breasted Grosbeaks are apparently of but casual occurrence. In spring they visit us regularly, the first males arriving shortly after the 15th of April. Loiterers tarry behind until about the middle of May. In some years they are decidedly common. They are found singly and in small companies. My previous assertion as to their partiality for high ground does not hold good. If latest experiences were taken as a criterion, the contrary rather would be found to be true. On their northward journey they are inclined to be musical.

152. *Spiza americana*. DICKCISSEL. — I entered this Finch as a "summer resident" in the second list on the strength of its having been ob-

served commonly in certain restricted situations near the town in 1883 and 1884. I supposed then that previously it had been overlooked, but I am now constrained to believe that its appearance was sporadic, as it has not been seen since in the six years that have elapsed. It is remarkable that it should come so abruptly, be common for two seasons, and then utterly abandon the locality.

56. *Vireo solitarius*. BLUE-HEADED VIREO.—The Blue-headed Vireo is a regular, but not common migrant. In spring it occurs in April (4 to 21). In fall, it returns about the middle of October—15th the earliest date—and abides until November. Laggards sometimes linger on into this latter month. These Vireos sing finely in April, and occasionally, though imperfectly, in autumn. While uttered with equal force and unction, the musical efforts of the vernal performers (intermediates) seem to lack the penetrating power peculiar to *alticola* as heard in its mountain home. Still they may not attain their complete song when migrating.

All the spring specimens that have been taken are intermediate between *solitarius* and *alticola* (their upper parts beyond the rump being strongly washed with plumbeous), while the majority of the autumnal ones are typical *solitarius*. Taking the Pickens examples (Auk, Vol. VII, p. 126) as a basis of comparison, I am impelled to rank these intergrades with *solitarius*. The uniform deep black of the bill in adult *alticola* seems to be a more potent character in the discrimination of the two forms than the variable plumbeous veiling of the upper portions, which, however, in extreme *alticola* is always diagnostic. In Chester specimens—both in spring and fall—the lower mandible invariably displays plumbeous. In some the plumbeous predominates, the tip only being black. The black of the whole bill is of a slaty cast, not an intense black as in the mountain race. Mr. Ridgway has informed me that the examples of *solitarius* which have passed under his notice have invariably had the basal half, at least, of the lower mandible plumbeous.

189. *Helinaia swainsonii*. SWAINSON'S WARBLER.—A male was taken Aug. 30, 1887, in the neighborhood of the town (Auk, IV, 347). Whether this individual was simply an estray from the seaboard or a transient from an inland habitat can only be surmised. It is worthy of note that a terrific storm prevailed ten days before along the coast of North Carolina, and that the largest flock of Ricebirds—chiefly coastwise migrants in South Carolina at this season—ever witnessed here in the southward migration was met with Aug. 22—two days after the storm.

26. *Helmitherus vermivorus*. WORM-EATING WARBLER.—This Warbler has been noted from July 25 to October 6, and from April 19 to May 12. So far as known, it does not breed. It appears to be more numerous in some years than in others. Viewed in the most favorable aspect, it does not reach higher rank in the scale of abundance than tolerably common. During its transits it is seen at intervals rather than continuously.

190. *Helminthophila pinus*. BLUE-WINGED WARBLER.—A male was obtained April 30, 1887. This is the only instance of its capture in this vicinity.

191. *Helminthophila chrysoptera*. GOLDEN-WINGED WARBLER.—The following are the only data I possess of its occurrence: a male, Sept. 13, 1886; a female, Aug. 20, a male, Sept. 22, 1887; a male, Aug. 28, 1888.

192. *Helminthophila celata*. ORANGE-CROWNED WARBLER.—Two have been taken: a male, Oct. 21, 1887, and a female, April 24, 1889. This one alone of the *Helminthophila* has been procured during both migrations.

144. *Helminthophila peregrina*. TENNESSEE WARBLER.—The summary of later specimens secured, given below, shows that this member of the genus is not wholly uncommon here. Whether it is as plentiful every fall, can be satisfactorily determined only by a continuance of the methodical study of woodland Warblers conducted during the seasons when the specimens were taken. It has not been detected in spring.

1886: Sept. 8, one; 9, two; 28, one; Oct. 1, one; 2, two; 6, one; 9, one.

1887: Oct. 4, two; 5, five; 6, one; 15, one.

1888: Oct. 3, one; 8, two; 9, one.

35. *Dendroica tigrina*. CAPE MAY WARBLER.—Cape May Warblers are not common in this vicinity. April 15 to May 3, and October 4 to 26, are the limits within which they have been obtained. In autumn they become extremely fat. Two females, shot Oct. 4, 1888, were so obese that I was completely puzzled for a moment as to what they really were.

34. *Dendroica maculosa*. MAGNOLIA WARBLER.—Migratory; rather common. Journeying northward, they pass through during the first two weeks of May. Coming southward, they reappear in September—Sept. 3, the earliest instance. Until the closing week of this month they are seen but infrequently, the main body not arriving until about Oct. 1. Before the end of a fortnight all disappear. In song during their spring visitations.

193. *Dendroica cærulea*. CERULEAN WARBLER.—The work of recent years has proved that this bird is a regular migrant, though rather rare. It has occurred in spring from April 13 to 30, and also late in summer and in fall, Aug. 8 to Oct. 22. Its presence so soon in August leads to the inference that it breeds near at hand in the mountains.

33. *Dendroica pensylvanica*. CHESTNUT-SIDED WARBLER.—In spring they pass quickly, appearing the last week of April and disappearing by the 15th of May. They do not seem to be very common during this migration. Returning, the first reach here about the middle of August—16th and 17th in 1887. Their stay is prolonged, normally, until about the second week of October—Oct. 19, 1887, latest record. During the southward passage they become very common, especially in September. Except in spring, only those in the incomplete attire of the young have been procured. On the way north they sing somewhat.

194. *Dendroica castanea*. BAY-BREASTED WARBLER.—Has been taken but twice: May 14, 1887; May 5, 1888. Both were males.

31. *Dendroica blackburniæ*. BLACKBURNIAN WARBLER.—Rare during the northward movement; very common in the southward. The former progress apparently takes place at the end of April and during the

early part of May; and the latter, from about the beginning of the second week of August to about the middle of October—Aug. 8, Oct. 22, the extremes noticed. The greatest rush usually occurs during the fortnight centring around October 1. These late comers are supposed to be Northerners. Individuals often grow exceedingly fat in autumn. They sing while northbound.

195. *Dendroica dominica albilora* SYCAMORE WARBLER.—The *Dendroica dominica-albilora* group is represented in this section by both *dominica* proper and *albilora*. The two forms, in fall at least, are about equally numerous. Collectively, they are rather common, especially during the migrations. The term of sojourn extends from the end of March (the precise time varying in different years) to about the first of October (March 22-Oct. 4). It has not been ascertained whether true *albilora* breeds here; for the exact status of the breeding birds yet awaits determination. The breeders leave early, and a period of absence intervenes between their going and the coming of the August and September migrants. As would naturally be anticipated, the locality furnishes a goodly supply of intermediates.

28. *Dendroica virens*. BLACK-THROATED GREEN WARBLER.—A spring and autumn migrant; tolerably common. March 31-May 9, September 20-October 24, are the earliest and latest dates of its capture. It is eminently an October Warbler during fall. In full song in spring.

196. *Dendroica kirtlandi*. KIRTLAND'S WARBLER.—The taking of a female, Oct. 11, 1888, has previously been noticed in this journal (Vol. VI, Jan., 1889, p. 74). The geographical position of South Carolina, midway between the Bahama Islands and the States of Ohio and Michigan, suggests that this bird, which was here late in the southward migration, was something more than a mere wanderer.

38. *Dendroica palmarum*. PALM WARBLER.—As a winter resident the Palm Warbler can scarcely be regarded more than a straggler. Through the past three winters only one was seen, which shows that protracted mild weather does not exert a controlling influence over its presence by causing greater abundance. In the southward migration it is abundant. The first begin to appear about the second week of September. Usually by the latter part of October the bulk have passed. In spring it remains through April,—the chief month of its northward movement,—but it does not become as plentiful then as in autumn. *D. hypochrysea*, in winter, is even rarer and more uncertain. In fall, also, it is rare, but during April it seems to be as numerous as *palmarum*.

40. *Seiurus aurocapillus*. OVENBIRD.—Migratory; common. A month, from about the middle of April to the middle of May, is consumed in the northward passage, and over two months, from the beginning week of August (7th earliest capture) to the middle of October, in the southward. A belated female, taken Oct. 29, is an extreme instance of tardiness. While passing through in spring the ordinary song notes are vigorously pronounced.

197. *Seiurus noveboracensis notabilis*. GRINNELL'S WATER-THRUSH.—

Considered from the standpoint of the widened diagnosis of the 'Manual of N. A. Birds,' the prevailing Water-thrush of this locality is *notabilis*. With the exclusion of a single example, all that have been taken are of medium and small size. True *noveboracensis* is a *rara avis* in this section. Intermediates are more common. Some of them are so fairly midway between the two forms as to render impracticable their being assigned to either. Migrant only; April 28-May 28; September 1-29. Rather common.

198. *Seiurus motacilla*. LOUISIANA WATER-THRUSH.—This species has been taken only upon three occasions, viz., Aug. 10, 1887; July 25 and 31, 1888.

42. *Geothlypis formosa*. KENTUCKY WARBLER.—It is a periodic visitant at the close of April and early in May, and again during the first part of September; but it is rather rare. Sings with effect in spring.

199. *Geothlypis agilis*. CONNECTICUT WARBLER.—The general rarity of spring specimens, especially enhances the value of the solitary one (a male) in my collection, labelled May 10, 1889.

146. *Sylvania mitrata*. HOODED WARBLER.—Up to the present the Hooded Warbler has not been discovered breeding, but it is expected that a thorough exploration of the river region will establish the fact. It is quite common during both migrations, having been observed from April 16 to May 6, and Aug. 6 to Oct. 17. The last date is exceptionally late, the season properly closing with September. While *en route* to their breeding grounds, they sing.

200. *Sylvania pusilla*. WILSON'S WARBLER.—In all these years but a single individual, shot May 10, 1887, has fallen to my gun.

45. *Sylvania canadensis*. CANADIAN WARBLER.—Rare or casual in fall (September); not uncommon at times in spring (first two weeks of May), when they render themselves conspicuous by their frequent singing.

46. *Setophaga ruticilla*. AMERICAN REDSTART.—Between my latest spring (May 21) and earliest summer (July 10) record, there is a gap of but seven weeks. The July birds are few in number, and usually appear during the last week of the month. Through August decided movements take place, and about the middle of September the full tide reaches here. Then for a while they are among the most abundant of sylvan inhabitants. By the first of October a considerable decline has been witnessed, although they are still common. After the third week, at farthest, they are no longer seen. From about the second week of April (April 10, first) through the third week of May, they have been met with in spring. During this vernal progress they become very common, and are not infrequent musicians.

20. *Thryothorus bewickii*. BEWICK'S WREN.—Breed very sparingly. They are conspicuously common (perhaps more so in certain seasons than in others) during their migrations, which occur, mainly, in the latter part of September, in October, February (particularly the last portion) and March. In December and January, in some years, they

are rather common, and in others they are almost wholly wanting—the local centre of abundance having been transferred to some other locality. This shifting of habitat does not seem to be imputable to cold, as it was illustrated in a marked manner the past winter, 1889-90. For a week, at the close of December, 1889, there appeared to be a slight influx of these Wrens independent of the general migratory movement. In spring and autumn, and during genial days in January and February, they are exquisitely vocal.

201. *Troglodytes aëdon*. HOUSE WREN. — Abundant as this bird is said to be in some parts of the State, I have seen but two, and these, May 4, 1888.

143. *Cistothorus stellaris*. SHORT-BILLED MARSH WREN. — No special search has been made for this Wren. Three, however, have been incidentally shot since the original one was procured—Oct. 8, 10, 1885; Oct. 5, 1888.

16. *Sitta canadensis*. RED-BREASTED NUTHATCH. — For a long time the idea of extreme rarity was associated with the name of this Nuthatch. Over nine years passed before the example of the 'Partial List' was duplicated. Latterly so many have been collected that it now seems that they must have been overlooked in former years. The first intimation of their comparative abundance came with the securing of three males in October, 1886; two on the 2d, and the remaining one on the 13th. September 28, 1888, a female and two more males were added to the previous number; and in 1889 a female, Oct. 19, a male, Dec. 14, a female and three males, Dec. 21. The last belonged to a little party that was quartered in a pine grove along with a company of Brown-headed Nuthatches, several White-breasted Nuthatches, and a group of Pine Warblers. This was the first time I ever had the pleasure of finding these three Nuthatches together in the same piece of woods, and the experience of shooting them in succession was highly novel. Boreal weather is manifestly not to be accounted the cause of their advent, for the thermometer ranged around 70°F. at midday for some time before and after.

202. *Turdus fuscescens salicicolus*. WILLOW THRUSH. — A typical male was secured Oct. 5, 1888 (*Auk*, VI, 194). Until an exhaustive study of the 'Wood Thrushes' (*Hyllocichla*) has been made, the true position of this Western subspecies in this section must remain uncertain.

203. *Turdus aliciae bicknelli*. BICKNELL'S THRUSH. — Of this miniature form of the Gray-cheeked Thrush, two characteristic exemplifications have been obtained—a male, May 6, and a female, Sept. 17, 1887. *T. aliciae* is common, and is here as a temporary resident during the first three weeks of May and from the last of September to about the 15th of October.

(To be concluded.)