

412 a. *Falco rusticolus* Linn. GRAY GYRFALCON.

- 1758.—*Falco rusticolus* LINN. S. N. 10 ed. I, p. 88.—*Id.*, S. N. 12 ed. p. 125 (1766).—FABRICIUS, Fauna Groenl. p. 55 (1780).—MOHR, Islandsk Naturh. p. 19 (part.) (1786).—GMELIN, Syst. Nat. I, p. 268 (1788).—LATHAM, Ind. Orn. I, p. 28 (1790).
- 1764.—*Falco islandus* BRÜNNICH, Orn. Bor. p. 2, No. 9.—GMELIN, Syst. Nat. I, p. 271.
- 1776.—*Falco islandus fuscus* MÜLLER, Prod. Zool. Dan. (p. 73 and pag. viii, fide Fabr.).
- 1780.—*Falco fuscus* FABRICIUS, Fauna Groenl. p. 56.
- 1783.—*Falco gyrfalco* BODDAERT, Tabl. Pl. Enl. p. 13 (nec LINN.).
- 1788.—*Falco candicans* β *islandicus* GMELIN, Syst. Nat. I, p. 275.
- 1800.—*Falco islandicus* DAUDIN, Tr. d'Orn. II, p. 100 (nec LATHAM).
- 1800.—*Falco groenlandicus* DAUDIN, Tr. d'Orn. II, p. 107 (nec HANC.).—BREHM, Isis, 1826, p. 990.
- 1854.—*Falco arcticus* HOLBOELL, Zeitschr. Ges. Naturw. III (p. 426) (nec *F. communis* μ *arcticus* GMEL. 1788).
- 1862.—*Falco gyrfalco groenlandicus* SCHLEGEL, Mus. P. B. Falc. p. 13.
- 1862.—*Falco gyrfalco islandicus* SCHLEGEL, Mus. P. B. Falc. p. 14.
- 1873.—*Falco holboelli* SHARPE, P. Z. S. 1873, p. 415.
- 1883.—{ *Falco gyrfalco candicans* }
 { *Falco candicans gyrfalco* } SEEBOHM, Brit. B. Eggs, I, p. 16.
- 1884.—*Hierofalco islandus a holboelli* GURNEY, Diurn. B. Prey. p. 111.

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SUPPLEMENTARY NOTES ON THE ORNITHOLOGY
 OF CHESTER COUNTY, SOUTH CAROLINA.

BY LEVERETT M. LOOMIS.

THE writer, in continuing his notes on the birds of Chester County, South Carolina, would express his great indebtedness to the late Dr. T. M. Brewer, not only for the careful revision of his former work, but for many very valuable suggestions in his studies of the ornithology of this region.

Since the publication of the 'Partial List,'* thirty-eight species and two subspecies have been added to those already

* Bull. Nutt. Ornith. Club, Vol. IV, No. 4, pp. 209-218, Oct. 1879.

ascertained to occur in this locality. These, together with further data as to the abundance and period of residence of others previously recorded, are incorporated in the subjoined notes.*

The nomenclature and arrangement followed is that of Dr. Coues's 'Key to North American Birds' (second edition) and the same author's 'Check List and Lexicon.'

22. *Eremophila alpestris*. HORNED LARK. — The following tabulation exhibits the comparative abundance of this species during six winters :

1876-77 (severe). Very abundant.

1877-78 (mild). Rather common.

1878-79 (medium). One small flock.

1879-80 (medium). Occasional.

1880-81 (severe). Very abundant.

1881-82 (mild). None observed.

During the unusually inclement weather of January, 1884, I was constantly on the lookout for it, but only one small flock was noted, and that after the snow had disappeared. Its absence, in a season apparently so favorable for its appearance, is doubtless to be accounted for by the fact that the protracted cold wave came from the northwest. During the stay here, the grain fields, cotton lands, the last year's stubble, and other sparsely grassed tracts are chosen resorts.

50. *Iridoprocne bicolor*. WHITE-BELLIED SWALLOW. — Occurs quite commonly during the migrations. Most numerous in the vicinity of mill-ponds and other extended bodies of water.

65. *Melospiza palustris*. SWAMP SONG SPARROW. — A common winter resident, especially abundant during its passage. Tenants the undergrowth bordering streams, ponds, and swampy meadows.

76. *Dolichonyx oryzivorus*. BOBOLINK. — Migrant only; in spring abundant in large flocks foraging in the ripening oat-fields; in fall common, singly or in small groups; the grain fields, overgrown with rag-weeds (*Ambrosia artemisiæfolia*), and the bottom lands are resorted to. Arrives about the first of May and remains a couple of weeks. Earliest autumnal record, August 26; latest, October 15.

83. *Quiscalus purpureus*. PURPLE GRACKLE. — Winter; irregular; very abundant about the middle of February, when the species is migrating northward. Often associated in great droves with Red-wings, Cowbirds, and Rusty Grackles. A few breed.

108. *Asio accipitrinus*. SHORT-EARED OWL; MARSH OWL. — Rather common late in autumn and during winter. Frequents old broom-sedge fields. Have failed to determine its presence during the breeding season.

109. *Strix nebulosa*. BARRED OWL. — Common resident.

127. *Totanus flavipes*. LESSER TELLTALE; YELLOW-SHANKS. — Migratory; not very common.

* Nos. 22-135 relate to the former 'Partial List'; Nos. 141-180 are additional.

131. *Ardea herodias*. GREAT BLUE HERON; 'BIG BLUE CRANE.'—A constant resident, but most abundant through the summer.
135. *Porzana carolina*. CAROLINA RAIL. 'ORTOLAN.'—Observed only during the migration. I have found it quite common in swampy meadows. Not easily flushed; the mowers sometimes cut the grass over one before it can be made to take wing.
141. *Turdus ustulatus aliciae*. GRAY-CHEEKED THRUSH.—Transient visitant. Apparently not common.
142. *Telmatoodytes palustris*. LONG-BILLED MARSH WREN.—Chiefly spring and autumn. Rather common. A denizen of the bottoms.
143. *Cistothorus stellaris*. SHORT-BILLED MARSH WREN.—An individual was shot, September 18, 1880, in a little depression along the side of a railroad embankment. This spot, about half an acre, becomes boggy during wet weather, and is grown over with marsh grass and scrubby willows.
144. *Helminthophaga peregrina*. TENNESSEE WARBLER.—Only one instance of its capture, September 25, 1879.
145. *Dendroeca palmarum hypochrysea*. YELLOW-BELLIED RED-POLL WARBLER.—Both subspecies (*palmarum et hypochrysea*) are found through the winter, but neither is very common. During the migration the species is abundant—variety *palmarum* predominating. Inhabits cotton fields, weedy lands, and old fence rows.
146. *Myiodioctes mitratus*. HOODED FLYCATCHING WARBLER.—A single specimen taken September 25, 1879.
147. *Passer domesticus*. THE SPARROW; PHILIP SPARROW; 'ENGLISH SPARROW.'—This aggressive little foreigner has become firmly established in the town of Chester, especially in the business portions. The colony doubtless descended from the half dozen brought here from New York, during the summer of 1873, by the late Dr. A. P. Wylie, and set at liberty in his grounds.
148. *Centropheanes lapponicus*. LAPLAND LONGSPUR.—A single straggler, Jan. 1, 1881, evidently driven southward by the unusual severity of the season. (Previously recorded in Bull. Nutt. Orn. Club, Vol. VII, p. 54.)
149. *Centropheanes pictus*. PAINTED LONGSPUR.—One example, December 1, 1880. (For further record, see Bull. Nutt. Orn. Club, Vol. VI, pp. 115, 116.)
150. *Coturniculus henslowi*. HENSLOW'S GRASSHOPPER SPARROW.—A tolerably common migrant, appearing early in spring and lingering late in autumn. In localities where I find *passerinus* in summer and *leconteii* in winter, I look confidently for *henslowi* during the migration. It is by far the least distrustful of any of the birds of my acquaintance. If by chance it happens to be in an open space where the grass affords no concealment, it will permit the intruder to advance within a very few feet before running away—only taking flight when forced to do so.
151. *Coturniculus leconteii*. LECONTE'S GRASSHOPPER SPARROW; LE CONTE'S BUNTING.—A common winter inhabitant, in certain localities, of

neglected 'old fields.' This Sparrow displays a very marked preference for dry ground. Nowhere is this more apparent than in the 'black-jack' fields of broom-sedge, which become somewhat boggy after protracted rains. At such times the level tracts are deserted for the gentle declivities, or, if these are wanting, for some more congenial locality, while in ordinary showers they escape from the dense grass, saturated with water, to the thinner growth of the lighter soils. When under the shelter of the thick sedge, few birds are more difficult to get on wing, as they allow themselves to be nearly trod upon before removing. On one occasion a bird rose so near me it became entangled in my shooting coat. Again, under cover, they are still more difficult to start; although the spot be carefully noted and the ground thoroughly tramped over. In my earlier experiences I was often completely puzzled, but later observation revealed uniformity in their movements. Their most common way of escape is to lie still until you have passed, then suddenly jumping up from behind, dart off to one side. An assistant, by watching this manœuvre, greatly facilitates their capture. In one instance a second ally, a keen-nosed setter, was found useful, doing effective service when all efforts had proved unavailing. Again, as the chance may be, they will steal away in the thick sedge, or fly off through the open weeds. Briers and tall swamp grass are ever resorted to for protection. To gain the latter they will fly directly by the collector, if he happens to cut off the retreat, and when once under this friendly shelter, no amount of thrashing will bring them out. Sometimes they take to bushes and saplings, beginning at the lower limbs and hopping upward. One specimen was shot about ten feet above the ground. When not concealed, but in short grass, they are very tame, allowing one to approach within a few feet, and then running off a little way and stopping to look back. Their flight is low, and usually feeble and unprotracted, but under repeated molestations it becomes rapid and prolonged. In one instance a bush some six feet in height was cleared.

During their sojourn here they become very fat. The stomachs of birds examined through the winter contained several kinds of small seeds and fine gravel.

In certain specimens before me, secured during November, December, and January, narrow streaks extend in a band, about half an inch in width, across the jugulum. These markings are also continued toward the bill, forming noticeable maxillary lines.

The measurements of fifty-four examples, taken in the flesh, are as follows:—

	Length.		Extent.		Wing.		Tail.	
	mm.	in.	mm.	in.	mm.	in.	mm.	in.
Maximum	139.7	5.50	180.8	7.12	52.3	2.06	57.1	2.25
Minimum	130.8	5.15	175.2	6.90	49.0	1.93	52.3	2.06
Average	127.0	5.00	168.1	6.62	47.4	1.87	47.4	1.87

In five instances the wing and tail were found equal, but in no case did the length of the wing exceed that of the tail. (For original South Carolina record, see Bull. Nutt. Orn. Club, Vol. VII, Jan., 1882, pp. 54, 55.)

152. *Spiza americana*. BLACK-THROATED BUNTING.—In certain partially cleared grain fields around the town of Chester, this bird is a common summer resident.

158. *Zamelodia ludoviciana*. ROSE-BREADED SONG GROSBEAK.—During the migration. Not very common. Found only on high ground; especially heavily-timbered 'ridges.'

154. *Xanthocephalus icterocephalus*. YELLOW-HEADED BLACKBIRD.—An adult male of this western species was captured at Chester C. H., April 18, 1884. (Previously noted in 'The Auk,' Vol. I, p. 293.)

155. *Aluco flammeus pratincta*. BARN OWL; 'WHITE OWL.'—Rather common during the summer season. Said to be a permanent resident.

156. *Asio wilsonianus*. AMERICAN LONG-EARED OWL.—Winter. Moderately common. Not known to breed.

257. *Circus cyaneus hudsonius*. AMERICAN MARSH HAWK, or HARRIER; BLUE HAWK; 'OLD FIELD HAWK'; 'RABBIT HAWK.'—Very common in the winter, but has wholly escaped observation during the breeding season.

158. *Elanoides forficatus*. SWALLOW-TAILED KITE; 'FORK-TAILED HAWK.'—Summer. Rare. Said to have been much more abundant before the extensive deforestation of the country.

159. *Haliaeetus leucocephalus*. WHITE-HEADED SEA EAGLE; 'BALD EAGLE'; 'BIRD OF WASHINGTON.'—Occasionally seen during the vernal migration.

160. *Pandion haliaetus*. FISH HAWK; OSPREY.—Principally along the Broad and Catawba Rivers. One example from the water-shed, near Chester C. H.

161. *Lobipes hyperboreus*. NORTHERN PHALAROPE; RED-NECKED PHALAROPE.—One specimen, May 17, 1880, from a mill-pond near the town of Chester. (See Bull. Nutt. Orn. Club, Vol. V, p. 242.)

162. *Actodromas minutilla*. LEAST SANDPIPER.—Occurs during both migrations, but does not appear to be at all common.

163. *Totanus melanoleucus*. GREATER TELL-TALE.—Have met with this species but once. April 21, 1880, a single individual was shot, from a flock of seven, on the margin of a little mill-pond.

164. *Herodias egretta*. GREAT WHITE EGRET; WHITE HERON; 'BIG WHITE CRANE.'—Summer. Not very common, chiefly confined to the rivers. I have only one specimen in my cabinet from the dividing-ridge; a female, young-of-the-year, obtained July 12, 1881, in the suburbs of the town of Chester.

165. *Nyctiardea grisea naevia*. BLACK-CROWNED NIGHT HERON; QUAWK; SQUAWK.—An immature female of this Heron was secured August 28, 1881, on a creek near the town.

166. *Rallus virginianus*. VIRGINIA RAIL.—Known only as a migrant. Frequents swampy meadows overgrown with tall grass.

167. *Gallinula galeata*. COMMON GALLINULE; FLORIDA GALLINULE; RED-BILLED MUD-HEN.—An adult male bird was taken, on the grassy banks of a small mill-pond, May 19, 1884.

168. *Cygnus columbianus*. COMMON AMERICAN SWAN; WHISTLING SWAN.—Winter visitant. Not common.

169. *Bernicla canadensis*. CANADA GOOSE; COMMON WILD GOOSE.—Winter. Common. Mainly restricted to the Broad and Catawba.

170. *Dafila acuta*. PIN-TAIL DUCK; SPRIG-TAIL.—Only in a single instance, March 12, 1883, have I met with this species.

171. *Querquedula carolinensis*. AMERICAN GREEN-WINGED TEAL.—Winter visitor. Tolerably common.

172. *Spatula clypeata*. SHOVELLER DUCK; BROAD-BILL.—Winter, but particularly spring and fall. Not uncommon.

173. *Aix sponsa*. WOOD DUCK; SUMMER DUCK; 'THE BRIDE.'—Permanent resident. Breeds. Individuals have been seen during June in a little carp pond in the town. Several crowded tenement houses near by make the situation a very exposed one.

174. *Fuligula affinis*. LESSER SCAUP DUCK; LITTLE BLACK-HEAD.—Of regular occurrence in winter; but not abundant.

175. *Fuligula collaris*. RING-NECK DUCK. Winter sojourner. Rather numerous. Specimen taken May 7.

176. *Fuligula ferina americana*. RED-HEAD; AMERICAN POCHARD.—One case, March 1, 1883.

177. *Clangula albeola*. BUFFLE-HEAD; BUTTER-BALL; SPIRIT-DUCK; DIPPER.—Frequently taken during winter.

178. *Mergus cucullatus*. HOODED MERGANSER.—Winter resident. Plentiful. I am not aware that any remain during the breeding season in this immediate locality.

179. *Rhynchops nigra*. BLACK SKIMMER.—A female bird-of-the-year of this maritime species was taken, Sept. 10, 1882, in the town of Chester. During the morning, and on the previous day, there had been a heavy easterly gale, which evidently had driven it in from the coast; the nearest point, as the birds fly, Long Bay, Georgetown County, being about one hundred and fifty miles distant.

180. *Podiceps cornutus*. HORNED GREBE.—Noted merely on one occasion, March 4, 1880, when a specimen was secured.

THE ROCK PTARMIGAN OF NEWFOUNDLAND.

BY WILLIAM BREWSTER.

IN the summer of 1883 Mr. George O. Welch, of Lynn, Mass., collected a number of Rock Ptarmigan on Newfoundland. The series showed little variation, aside from that dependant on