birds, due to the essential difference of sex and any variations in voice which might arise would be preserved in the male germ which assures the variation in the species while the germ of the female guarantees the constancy of the species.

SOME ADDITIONS AND OTHER RECORDS NEW TO THE ORNITHOLOGY OF SOUTH CAROLINA.

BY ARTHUR T. WAYNE.

SINCE 'My Birds of South Carolina' was published in 1910, I wish to announce the addition of four species new to the fauna as well as the noteworthy capture of many birds, and the early breeding of Bachman's Warbler. Information of this kind is gained slowly, and requires constant, if not daily, exploration of fields, forests, and water areas.

Puffinus griseus. SOOTY SHEARWATER.— A specimen of this species was picked up dead on the beach of Bull's Island on, or about, the last of May, 1916, by Mr. Clarence Magwood. I examined the bird about a week after it was found. This date probably represents the time when the birds make their appearance in the spring on the South Carolina coast.

Histrionicus histrionicus. HARLEQUIN DUCK.— During the intensely cold weather which began on December 30, 1917, and continued through the third week of January, 1918, I was constantly on the lookout for far northern birds. On January 14, I saw four of these ducks, and on the 16th, I saw two more near the place where the first were seen on January 14. These ducks were probably not more than 75 or 80 yards from me and the identification was established without a doubt despite the fact that I was unable to shoot one. All the examples were in the plumage of the female and must have been that sex or else young males of the first winter plumage. Near at hand were small flocks of Buffle-head (*Charitonetta albeola*), Old-squaw (*Harelda hyemalis*), and Ruddy Ducks (*Erismatura jamaicensis*), and the Harlequin's were easily identified. This is an addition to the avifauna of South Carolina.

Chen hyperboreus hyperboreus. SNOW GOOSE.—On October 16, 1916, Mr. Lucian L. Porcher shot on Porcher's plantation, Christ Church

Parish, a beautiful young female of this species and gave it to me, which is now in my collection. This specimen is very small and scarcely larger than Ross's Snow Goose (*Chen rossi*). The form of the Snow Goose that was known to occur in South Carolina was the Greater Snow Goose (*Chen* hyperboreus nivalis), therefore the capture of C. h. hyperboreus is an addition to the ornithology of South Carolina.

Chen cærulescens. BLUE GOOSE.— Among a small collection of birds at the Santee Gun Club, Santee River, is a fine specimen of this bird, being shot on the preserves of the Club by Mr. Frank Carnegie, and presented by him to the Club. Mr. Carnegie shot this goose about ten years ago. This is another addition to the fauna of South Carolina.

Herodias egretta. EGRET.— On December 18, 1917, I saw a beautiful specimen of this bird flying near at hand over a frozen pond near my home. Heretofore I have not observed this species later in the autumn than the first week in November, for this bird is susceptible to cold. I could easily have procured it, but as I never molest them at any season, hoping for those remaining to increase, I let it remain. I, however, did not observe it again after the intense cold, beginning on December 30, and which lasted uninterruptedly until the third week in January, 1918, therefore the bird undoubtedly migrated.

Nyctanassa violacea. YELLOW-CROWNED NIGHT HERON.— A most exquisite specimen of this heron that I shot on October 5, 1916, according to Mr. Ridgway's 'Color Standards and Color Nomenclature,' 1912, has the back, wings and upper parts (exclusive of head) 7 Deep Gull Gray, while the under parts are near to the shade 8 Gull Gray. The forehead, crown, and occiput are white or yellowish white in which are numerous chestnut or reddish brown feathers. Although this lovely bird is in fresh, unworn, autumnal plumage the occipital feathers and the long dorsal plumes of the supposed breeding plumage are present and as perfectly developed as in the latter season. The specimen is the largest I have yet seen or taken, and my experience with this bird goes back to 1884. I realized as soon as I saw it near at hand that it was the most beautiful example I had ever seen.

Numenius hudsonicus. HUDSONIAN CURLEW.— On December 11, 1917, while I was *en route* to Long Island (Isle of Palms) in search of Ipswich Sparrows (*Passerculus princeps*) I heard, then saw, a Hudsonian Curlew near Bullyard Sound (Santee Path). The case was so novel that I could scarcely believe my ears and eyes, as the latest record upon which I had detected this bird in the autumn was October 2, 1885, when I shot two on Sullivan's Island. I determined to obtain this bird, as the desire of possession of a *winter* example was most keen with me!

The bird was very shy and flew about a half mile to an adjacent sound where I marked it in a superficial manner. About this time the wind began to blow hard from the northeast with about freezing temperature. I followed this bird from place to place and, after firing six shots at it at long range, I finally secured it with a heavy charge on my seventh shot. The specimen was not crippled, being very fat and very wild, and is in fine, unworn plumage. Although Audubon¹ says that "I once saw a large flock of them near Charleston, in the month of December," he must have confused this species with the Long-billed Curlew (*Numenius americanus*) which latter bird wintered along the South Carolina coast in vast numbers up to 1885 or a few years later.

Arenaria interpres interpres. TURNSTONE --- On May 30, 1918, I shot on Dewees Island five birds at one shot and from the same flock, all of which are in perfect nuptial plumage. One specimen — an adult male having more black in the upper parts than any individual I had previously taken led me to compare it with an European specimen, Mr. J. H. Riley having sent me an adult male from the U.S. National Museum collection taken at Havre, France, on May 15, 1875. This French bird has the wing $5\frac{7}{8}$ inches, and the wing of the South Carolina specimen is of the same length. According to 'The Water Fowl Family 'Dr. Bishop gives the wing measurement for A. interpres as more than 6 inches, and for A. interpres morinella as under 6 inches. The South Carolina bird is identical in coloration with the European except that it has more reddish in the wing-coverts: and if *interpres* is really distinct from *morinella* (which is doubtful, as a typical morinella in coloration has the wing more than 6 inches) an European bird has been added to the fauna of South Carolina. Ruddy Turnstone's, i. e. males in perfect nuptial plumage, vary endlessly in the amount of black in the upper parts. A lovely male taken by me on May 26, 1910, has very little black on the upper parts, the reddish color everywhere prevailing. The specimen taken May 30, 1918, that is referable to A. i. interpres, has two coal black feathers among the white feathers of the abdominal regions.

Falco columbarius columbarius. PIGEON HAWK.— While watching a pair of Rough-winged Swallows (*Stelgidopteryx serripennis*) building a nest in an ancient limekiln from which a round limb had rotted leaving a long, round symmetrical hole, in which the Swallows were depositing pieces of sedge on May 15, 1918, a Pigeon Hawk attacked and caught a Barn Swallow (*Hirundo erythrogastra*) with superlative ease and flew with it first to the beach then to a high, dead pine about 400 yards away. I hastened to the tree hoping to secure it; but as I was almost in proper range the hawk which had already devoured the swallow flew to such a distance that I could no longer follow it with my eyes.

The Pigeon Hawk is now a very rare bird on the coast of South Carolina and has always been very rare in the spring, the last time I observed one was on April 13, 1900, an adult male in beautiful plumage, that I shot, and which is now in my collection.

Myiarchus crinitus. CRESTED FLYCATCHER.— On December 11, 1914, I heard the note of a Crested Flycatcher and upon following the

¹ Birds of America, Vol. VI, 1843, p. 42.

sound found the bird perched upon a tall water oak tree in a large forest. Although the ponds were frozen over this bird was calling as though it was the month of May or June, and it was indeed an anomaly! I collected the bird. The specimen is in fine, unworn plumage and was very fat. Had I not shot this bird it would have undoubtedly wintered. It is now in my collection.

Quiscalus quiscula æneus. BRONZED GRACKLE.— I shot on March 14, 1918, a superb adult male of this bird near Mount Pleasant. I was following some Florida Grackles through a large dense swamp trying to collect a large male, but the birds were so wild it was difficult to get within range. At last I hid behind a large tree and a large bird came within range which I promptly shot. Upon securing it I was surprised to find that I had at last taken a Bronzed Grackle, which is an addition to the fauna of the coast.

The Bronzed Grackle is without doubt a *species*, as I cannot find any intergradation among specimens taken from South Carolina to Kansas.

Quiscalus quiscula quiscula. CAROLINA GRACKLE.— The type locality of this Grackle is stated to be South Carolina founded on *The Purple Jack Daw, Monedula purpurea*. Catesby, Nat. Hist. Carolina, I, 1731, 12, pl. 12, in Linnæus' Syst. Nat., ed. 10, I, 1758, 109.

An examination of the text of Catesby's book, however, proves conclusively that the birds to which he refers were in reality the Florida Grackle (Quiscalus q. aglæus). Catesby's birds undoubtedly came from the coast of South Carolina. He says: "They make their Nests on the branches of trees in all parts of the country, but most in remote and unfrequented places; from whence in Autumn, after a vast increase, they assemble together, and come amongst the Inhabitants in such numbers that they sometimes darken the air, and are seen in continued flights for miles together, making great devastation of grain [rice] where they light." The Florida Grackle belongs strictly to the region near or adjacent to the coast, but always avoiding salt water; its nest is invariably built in trees or in low bushes over water, but never in woodpecker holes or in natural cavities of trees. The Florida Grackle therefore becomes the type of the genus with the type locality fixed as the coast of South Carolina, and I suggest the name of Carolina Grackle for the species.

This will leave the Purple Grackle without a name, the earliest available one seems to be *versicolor* Vieillot, Nouv. Dict. d'Hist. Nat., XXVIII, 1819, 488 (North America). The name of the Purple Grackle will therefore be *Quiscalus quiscula versicolor* Vieillot, and the Carolina (i. e. Florida) Grackle, *Quiscalus quiscula quiscula Linnæus*.

Passerculus princeps. IPSWICH SPARROW.— I made three trips to Long Island (Isle of Palms) in the autumn and winter of 1917 and each trip represented a walk of fifteen miles over low sand hills. It was not until my last visit on December 28 that I was able to detect even one of these birds which was secured after a long chase. This bird, although a young male of the year, has the superciliary stripe marked somewhat strongly with canary yellow. It was also undergoing a moult embracing the head, jugulum and upper breast feathers.

Passerherbulus lecontei. LECONTE'S SPARROW.— In 'Birds of South Carolina,' 1910, page 120, I expressed my belief that many of these birds remain until April. During the past winter of 1917–1918 Leconte's Sparrows were present in considerable numbers. As usual fires were of a daily occurrence on account chiefly of a long protracted drought so that fields of broom grass, as well as dense forests, were completely burned over. I, however, succeeded in saving a field of broom grass near my home, which embraced about ten acres, from the flames. In this field I procured specimens in March and April as follows: March 22, one; April 4, one; April 17, one undergoing a spring moult was taken; April 27, one in very worn plumage was secured. Of the series of thirty-one birds taken only five were males, which was the case in the winter of 1893–94, when the birds were here in great numbers, showing that the males remain farther north.

Lanivireo solitarius alticola. MOUNTAIN SOLITARY VIREO.— On January 11, 1912, I secured a perfectly typical example of this large race near Mount Pleasant. The specimen is an adult male and the taking of it in January shows that a few sporadic individuals must winter regularly here.

Vermivora bachmani. BACHMAN'S WARBLER.— I found on March 28, 1918, on the extreme northeastern edge of I'On Swamp, near Witherwood plantation, a nest containing *five* eggs of the rare Bachman's Warbler. These eggs were incubated for at least five or even seven days and show that, although this bird does not winter, it arrives very early in the spring and breeds even much earlier than the resident Pine Warbler (*Dendroica vigorsii*) and Yellow-throated Warbler (*Dendroica dominica*).

Dendroica magnolia. MAGNOLIA WARBLER.— On October 10, 1915, I shot a young male of this species about 300 yards of the spot where the first one for the coast region was taken on September 29, 1912, and recorded by me in 'The Auk,' XXX, 1913, 277. It is evident that the Magnolia Warbler migrates in small numbers along the coast of South Carolina, in the autumn.

Dendroica virens. BLACK-THROATED GREEN WARBLER.— The brief account of this bird written in 'Birds of South Carolina' is, in the main, correct. Although I had never found it breeding when the book went to the press I was absolutely certain that it really bred on the coast in widely separated places due to the presence of original heavily timbered forests, which is requisite for the birds in the breeding season. And the reason for not stating that the birds breed here was that I respected the opinion of other persons whose views did not coincide with mine. On April 11, 1917, however, I found a female building a nest in a tall pine tree in I'On Swamp, and on April 25, 1918, I saw another female carrying nesting materials, but could not locate the place by following her, as the swamp was too dense. According to Mr. Loomis the birds breed in the mountains of Pickens County and also at Cæsar's Head, Greenville County

Auk Oct.

(see Auk, VII, 1890, 128, and VIII, 1891, 331). As far as I am aware, after searching the literature on the breeding range, there is no breeding *maritime* record south of Long Island, New York, which is nearly 600 miles northeast of the region where the birds breed on the South Carolina coast. This is indeed truly remarkable.

Oporornis agilis. CONNECTICUT WARBLER.— Misses Louise Petigru Ford and Marion J. Pellew saw at Aiken on May 12, 1915, an adult male on the ground among highland ferns. These ladies watched this bird for a long time through powerful opera glasses and no mistake whatever was made by them, as they are familiar with the resident as well as migratory birds found about Aiken. The Connecticut Warbler is very rare in the spring east of the Alleghenies. Mr. Loomis took one at Chester on May 10, 1889, but I have yet to take one in South Carolina.

LIST OF BIRDS COLLECTED ON THE HARVARD PERUVIAN EXPEDITION OF 1916.

BY OUTRAM BANGS AND G. K. NOBLE.

THE birds listed in the following notes were collected by one of us — Noble who accompanied as naturalist the Harvard Peruvian Expedition of 1916.

This was a short summer vacation trip, financed by friends of the Museum of Comparative Zoölogy, into the northwestern corner of Peru. Roughly speaking the expedition covered a triangular course from Payta to Tabaconas and thence out to the coast again at Chiclayo. The regions traveled were mostly desert or semidesert ones; at a few places only was real sub-tropical forest met with.

A careful itinerary by Noble will be published later with his account of the Reptiles and Batrachians, upon which he was working when he answered the call to the service of his country in war.

For the loan of, often very necessary, specimens we are much indebted to Dr. Chas. W. Richmond of the United States National Museum, Dr. Frank M. Chapman of the American Museum of