

BIRD PHOTOGRAPHING IN THE CAROLINAS.

BY B. S. BOWDISH.

Plates XV-XVII.

WITH AN ANNOTATED LIST OF THE BIRDS OBSERVED.

Compiled by P. B. Philipp.

OUR party, consisting of Messrs. P. B. Philipp, Clinton G. Abbott and B. S. Bowdish, left New York on the morning of June 9, 1909, and reached Charleston, South Carolina, on the following morning, June 10. We went at once to the Museum and saw Professor Rea and from him learned the exact location of two heron rookeries near Charleston Harbor, which were the main object of our visit to Charleston.

We were also directed to a Captain Fairchild, who runs a forty foot gasoline boat, the 'Ethel', a model example of comfort for our purpose, and whose dusky first mate was known as 'Jawn'.

As we passed out from the dock we took several memento views of the water-front, the custom house, and a lighthouse relief ship. Further down the bay we caught snaps of historic old Fort Sumter where was fired the first gun in the Civil War, and a little further out met a torpedo boat destroyer coming in.

For miles the coast is bordered with a wide fringe of salt marsh, intersected with open water courses or channels of varying width and depth, which cut the marsh up into islands, large and small. It was through such scenes that we proceeded to the rookery. Great and Little Blue, Louisiana and Green Herons, and one Snowy Heron were seen feeding in the marsh, and we noted Royal, Common and Least Terns, Laughing Gulls, a Willet and an Oystercatcher.

As we approached Secessionville Rookery we passed the little settlement Secessionville on the opposite side of the channel. Soon we could see the Herons sitting on their nests and feeding in a strip of marsh about the edge of the island. The size of the island was estimated at two and one-half to three acres. It was grown with dense patches of bay and sparkleberry bushes and cabbage palms, interspersed with open spaces of salt grass and prickly pear, the whole bordered with a strip of salt marsh. The heron nests were scattered

thickly through the bushes at a height varying from two to fifteen feet. The ground under the nests was well above tide and perfectly dry. We estimated the colony to consist of about 300 pairs of Louisiana Herons, 200 pairs of Green Herons, 100 pairs of Little Blue Herons, 25 pairs of Black-crowned Night Herons, and possibly 50 pairs of Snowy Herons, and the nests of a fairly numerous colony of Boat-tailed Grackles were scattered among the heron nests, generally placed higher and more in the slender tips of the branches. Only one photograph (an unsatisfactory one) of one of these birds was secured. Some of the young herons had left the nests and large droves of them were scrambling through the tops of the bushes. A large proportion of the nests held young in varying stages of development. A fair number of nests still held eggs, but they were mostly well along in incubation. Plumers had shot in this colony about three weeks before our visit, and we found two piles of the remains of Snowy Herons, eight in each, from which the plumes had been torn. Notwithstanding this the herons were all surprisingly fearless and unsuspecting. Most of the young of the grackle colony were out of the nest and well developed; some nests still contained young, and in two or three of these nests were one or two eggs, and one nest contained three fresh eggs.

We returned to Charleston that evening, stopping for a few minutes at Morris Island where there was a breeding colony of some twenty-five pairs of Least Terns and a few Willets and Wilson's Plovers. The next day, June 11, was spent at the Secessionville rookery in a largely fruitless effort to secure photographs. During a considerable portion of this time Mr. Abbott remained on Morris Island, securing some very good photographs of Least Terns about their eggs. We were caught on the rookery island by low tide and with great difficulty waded the "soap flats" to the row boat that was to take us back to the 'Ethel', being obliged to leave part of our outfit and return for it about one o'clock A. M. The herons became especially active about dusk when many returned with food for the young. Some few remained active during the night but apparently the majority went to roost. Insufficient time and an error of judgment resulted in our failing to get practically any heron photographs of value.

The next day, June 12, we started on the 'Ethel' for Bulls Bay,

stopping en route to photograph nests and eggs of Least Tern and a Wilson's Plover nest. Most of the Least Terns had two eggs, a few had only one and two had three. We also stopped for a very short time at Bird Island Shoal where some fifty Brown Pelicans and one hundred Royal Terns, with a few Black Skimmers, a large number of small sandpipers and one or two Willets were congregated. It was a well patronized feeding ground but there was no sign of any nesting. At Vessel Reef, a sandspit of about one half acre, there were about 1000 Black Skimmers, 500 Brown Pelicans and 75 Royal Terns. The Pelicans were not nesting but laying had just commenced with the Terns and Skimmers. We also noted one Oystercatcher nesting-hollow with one egg, and another with two.

We reached our final destination in Bulls Bay, at Raccoon Key, about five p. m. This is an island of considerable size and some of its sand dunes are fairly high. There were a good many Wilson's Plovers nesting here and perhaps fifty pairs of Least Terns. There were also quite a few Willets but they were much harassed by minks and Fish Crows; one nest with three eggs and another with one being the only ones we found that had not been robbed. In two cases we found the remains of birds that had been caught on the nests by minks and killed, while the empty shells in the nests beside them showed where the eggs had been sucked. We found one Oystercatcher's nest with two eggs. We remained at Raccoon Key till the following afternoon, when we returned to Charleston, having secured some very good photographs of Wilson's Plover, as well as of nests and eggs. On June 14 we secured the services of young Mr. Grimble with his gasolene boat, to visit the second heron rookery, which was on an island in the salt marsh on his father's property. This trip to and from the island took up the most of two days and was unsuccessful, as apparently the only nesting birds were a few Green, two or three Louisiana, and one pair of Black-crowned Night Herons. Boat-tailed Grackles and Red-winged Blackbirds had also nested there. Two dead Snowy Herons and remains of several Little Blue Herons were found. The evening flight of herons into the rookery indicated that it was being used as a roosting place by a considerable number of birds. A Black Vulture was seen in the rookery.

We left Charleston on the evening of the 15th, for Lake Ellis, North Carolina, which we reached about noon the following day

(June 16). Camp Bryan, belonging to several wealthy sportsmen who lease the surrounding area as a game preserve, had been kindly put at our disposal by the owners, and here we found Mr. H. H. Brimley, curator of the Raleigh Museum, awaiting us. A day or two later Mr. Nichols, the son of one of the owners, joined our party. We spent the afternoon in the rain, hunting King Rails' nests, of which we found one containing ten eggs, in the short marsh grass that covered a large part of Lake Ellis. Two nests of the Least Bittern with three eggs each, and one with five young, were found in this grass, in very different sites from those of normal nests that we had seen in the north. The flock of fourteen American Egrets which regularly fed at the lake was also seen.

The 17th was a cloudy day, raining at times, and as Mr. Philipp was sick, very little was accomplished. On the 18th a trip was made to Great Lake where there was a very interesting colony of Florida Cormorants, nearly thirty scattering nests of Osprey, seventeen of the Great Blue Heron, sixteen nests of the Little Blue Heron with eggs, and several of the Black-crowned Night Heron. The Cormorant rookery was situated on the two opposite points of a bay. I made a diagram on the spot, showing the trees in which most of the nests were placed, the approximate positions of these trees and the general height and number of nests counted. Only one nest with eggs was seen; a few were empty; the majority held young in various stages of growth, mostly well advanced. It was at Great Lake that the flock of fourteen American Egrets roosted but the nesting site is not known.

June 19 was largely consumed in securing photographs of the Least Bittern at its nest, and searching for nests of the King Rail. A nest of the Florida Gallinule was found containing four eggs which were just about hatching. Probably some had previously hatched. June 20 was spent at Great Lake, and a nest of the Prothonotary Warbler was found, containing well grown young. Fish Crows had entirely destroyed the eggs in the Little Blue Heron colony. The photographic feature of June 21 was the securing of a photograph of the Florida Gallinule at her nest, thereby proving that the nest was not a King Rail's as had been previously supposed. The camera was tripped with a thread about 150 yards long, the operator being concealed at the far end. At this distance it was impossible to dis-

tinguish the identity of the bird, and development alone revealed it and established a new breeding record for North Carolina. Some photographs of the Prothonotary Warbler were also secured, and a nest of the Pied-billed Grebe with four eggs was found.

June 22 was a comparatively uneventful day, and on the 23d we started for Royal Shoals. We spent that afternoon in a heron rookery near Beaufort, where the Louisiana, Little Blue, Green, Black-crowned Night and a few Snowy Herons had evidently nested in considerable numbers. The growth was taller and the nests at greater height than at the Secessionville rookery. The young were so well developed that they were able to travel well ahead of us, over the bush tops, as we forced our way through the tangled growth. Some shooting was reported to have been done in this rookery and the remains of a few dead birds were seen.

On the following morning the Audubon patrol boat 'Dutcher', captained by Warden Jenette, came in and we started on her for Royal Shoals, reaching there late that afternoon. This low sand spit, which had been a breeding place for a colony of Royal Terns, estimated in 1908 at 7,000 birds, had been washed over in the midst of that breeding season, with great loss to the birds, and the Royal Terns had not appeared in 1909 until the night before we reached there, when the first stragglers were arriving. There were about 250 Common Terns, 200 Least Terns, 200 Black Skimmers and 100 Laughing Gulls nesting on the island, which was a very narrow fishhook-shaped formation, with small bushes, weeds and grass at the shank end, where the Laughing Gulls bred. The Skimmers' nests were also mostly in that vicinity, as well as the principal colony of Least Terns, with nests of the Common Tern interspersed and also scattered about the hook. The Skimmers were just commencing to lay, though one nest was seen with five eggs. Most of the Common Terns' nests had three eggs, some two and one, and one nest held six eggs, undoubtedly laid by two birds. A few Least Terns had hatched; most of the nests had two eggs and a few one. The Laughing Gulls had nests of two and three eggs, and Warden Jenette reported that some young had hatched and were hiding in the weeds.

We remained at Royal Shoals till about three P. M. the next day, June 25. More Royal Terns arrived and thirty-six were counted

in one flock. On this date the warden reported his count of eggs as follows: Common Tern, 248; Least Tern, 107 and 12 young birds; Black Skimmer, 60. We started for Ocracoke ahead of one of the warden's 'living gales' or 'dangerous squalls', but reached there alive and well, about four-thirty p. m.

On the following day Mr. Abbott left us, bound for New York, while the rest of the party started for Buxton on Cape Hatteras. At noon we stopped at Miller Lump where a colony of about one thousand Royal Terns were breeding. Most of them had one egg, several two, and a few young had hatched. One Gull-billed Tern was seen and the warden reported that a pair had bred. There were also three pairs of Cabot's Tern, each with a single egg, in the colony. The birds had laid their eggs but a few inches apart on the highest part of the island and the area occupied was not over twenty feet in diameter and grouped about a warning sign. After doing some photographing we went on to Davis Lumps, on one of which a colony of about one hundred Black Skimmers were congregated, perhaps preparing to breed, and about twenty-five pairs of Common Terns were nesting. The latter had a number of young, some several days old, as well as eggs. We went on to Buxton, where we were entertained over the next day at the home of Dr. Davis, and spent a quiet Sunday.

On June 28 we returned to Miller Lump and did some more photographing. It was an occasion of rare pleasure to find the Royal Terns so fearless. When we sat in plain view, and not over one hundred feet from the eggs, the birds quickly returned, and by erecting a blind of the sea-weed drift, in great mats, over a framework of sticks, we photographed the birds at a range of fifteen feet or less.

Leaving for Ocracoke we stopped at Legged Lump, which is the property of the North Carolina Audubon Society. Notwithstanding the warning sign, the birds breeding here had been robbed regularly. Some two hundred Skimmers and a few Common and Least Terns were attempting to breed. We found one nest of the Common Tern with three eggs, one with two and one with one; one nest of the Least Tern with one egg and three with two each; two nests of the Skimmer with one egg each, four with two each, three with three each. Many empty nests of the Common Tern and Skimmer were seen.



ROYAL TERNS, PAMLICO SOUND, N. C.



BLACK SKIMMER.



YOUNG LEAST TERNS.



FLORIDA CORMORANT.



FLORIDA GALINULE, LAKE ELLIS, N. C.

On the docks at Moorehead City on June 29 we met and talked with A. T. Piner, who was one of the most active plumers in former times, and plied his trade along the Atlantic coast from Maine to Florida, killing all species of terns, the American Egret and Snowy Heron. The price he had received for terns' wings was one and one half cents a pair, and at this he had made good wages! He thought that he had himself killed twenty thousand birds, besides those killed by his assistants. He and one assistant would each skin one hundred Least Terns in twenty-four hours. When they found a colony of the lovely little Least Terns they were able to kill every adult bird, because the parental instinct brought the last one back to its nesting site. And then came the closing chapter in his gruesome tale. Many young already hatched at the time of the slaughter were left parentless. Many eggs, of course, never hatched, but others that were approaching the completion of incubation hatched in the sun, and the tiny chicks joined the ranks of their older brothers. This man had seen the tiny chicks gathered on the beach so thickly that they looked like drift brought up by the tide, huddled at the water's edge, dipping their little beaks in the salt wavelets in a vain endeavor to assuage the terrible pangs that dead parents could never again provide against. Those who have not visited these semitropical islets, whose flat, sandy surfaces lie just above the level of the lapping waves, can have no conception of what it is to feel the awful pangs of hunger and thirst, where water, sand and air reflect back again and again the all-pervading, burning rays of the sun. What a satisfaction to feel that this unspeakably brutal trade has been almost eliminated, as far as our own coasts are concerned, by the work so earnestly commenced by the Bird Protection Committee of the American Ornithologists' Union, and so ably carried on by the Audubon Societies.

ANNOTATED LIST OF BIRDS OBSERVED.

Compiled by P. B. Philipp.

1. **Podilymbus podiceps.** PIED-BILLED GREBE.— Abundant at Ellis Lake, N. C., where it was seen daily June 16–20. Breeds in the reedy marshes surrounding the lake; three nests were found June 16 and 20, one with 1 egg, one with 5 fresh eggs, and one with 4 fresh eggs; on June 20, one newly hatched chick was captured after a hard chase. The nests were all in patches of reeds where there was good diving water.

Mr. H. H. Brimley, of the North Carolina Museum, informs me that this nesting is the first record for the State. The birds have not heretofore been found nesting at Lake Ellis.

2. **Larus atricilla.** LAUGHING GULL; BLACK HEAD; SUMMER GULL.— A fair sized breeding colony of this gull was observed on Royal Shoal, Pamlico Sound, N. C., comprising some two hundred and fifty birds. The colony was visited on June 24, and at this date many of the nests were empty, the young having hatched; many other nests had 2 and 3 eggs, all advanced in incubation. The nests on the shoal were all carefully hidden in the rank beach grass and low bushes, and were found by following paths made by the birds. This gull was not noted breeding elsewhere on the trip.

3. **Gelochelidon nilotica.** GULL-BILLED TERN.— Seen only in Pamlico Sound, N. C., and there rare. A single tern of this species was seen June 25, in a large colony of Common Terns (*Sterna hirundo*), on Royal Shoal. On Miller Lump, off Buxton, further up the sound, a pair were seen June 26, which the warden told me had nested the previous week, the young having hatched. These could not be found.

4. **Sterna maxima.** ROYAL TERN.— Common in suitable localities along the coasts and among the shallow bays of North and South Carolina. Four breeding colonies were found. The first was situated on Vessel Reef, a low sand key in Bulls Bay, S. C., visited on June 12. About 75 birds were seen there and nesting had just begun, 3 fresh eggs being found. The second colony was on Royal Shoal, Pamlico Sound, N. C. Here, instead of the enormous numbers of the preceding season, estimated at some 7,000 birds, only fifty were found. On June 24 one fresh egg was noted. The third and largest colony was found on June 26, on Miller Lump, a small low sand bar in Pamlico Sound, lying in a broad expanse of very shallow water. This colony comprised 1,000 adult birds; the nesting was advanced. Some 258 good eggs were counted, usually one egg to a set, though a few doubles were found; there were also many young, some of which were able to run about. All the eggs were advanced in incubation. The fourth breeding colony visited was on Davis Lump, a small sand bar near Miller Lump. Here about 60 pairs of birds were breeding. Thirty-two eggs were counted, for the most part advanced in incubation; half a dozen newly hatched young were also seen.

Owing to the protection afforded by the North Carolina Audubon Society, the colonies in Pamlico Sound were in fair condition and the birds very tame, allowing a very near approach.

5. *Sterna sandvicensis acufflava*. CABOT'S TERN.—Rare in Pamlico Sound, N. C., the only locality in which it was seen. On June 26, six birds of this tropical species were found on Miller Lump, off Buxton, in Pamlico Sound. Here also three nesting hollows were found, each containing a single egg advanced in incubation. The birds were breeding with a large colony of Royal Terns (*Sterna maxima*).

Mr. T. G. Pearson tells me that in 1908 about 75 pairs of this tern bred on Royal Shoal.

6. *Sterna hirundo*. COMMON TERN; WILSON'S TERN; BIG STRIKER.—Very abundant in Pamlico Sound, N. C., where it was found breeding. Rare along the beaches and keys along the South Carolina coast near Charleston, and at Bulls Bay, S. C.; not found breeding there.

The largest colony visited was on Royal Shoal, where 248 eggs were counted on June 24, in a small area on the point of the shoal. The eggs were 2 or 3 in a nest; one nest seen having 6, probably laid by two birds. Other good sized colonies were found on Davis Lump June 26 (20 pairs); on Legged Lump June 28 (12 pairs).

Most of the eggs taken were advanced in incubation and many young had already appeared.

7. *Sterna antillarum*. LEAST TERN; LITTLE STRIKER.—Fairly common on the South Carolina coast. Seen at Morris Island, Charleston Harbor; at Raccoon Key, Bulls Bay, S. C. Common in Pamlico Sound, N. C.; seen on all the suitable lumps and keys. Breeds in each of these localities.

Four fair sized breeding colonies were visited. The first was on Morris Island in Charleston Harbor, where 50 pairs of birds were seen, and thirty nests with eggs, which on June 10 were fresh; a second colony of some 100 birds was found on June 12 on the south end of Raccoon Key, and ten or a dozen nests with fresh eggs. The third and largest colony was on Royal Shoal, Pamlico Sound, N. C., where some 200 birds were breeding. 107 eggs and 12 young being counted June 24, 25; a small colony of 20 pairs was found June 25 on Davis Lump, and 37 eggs counted; the eggs taken from these Pamlico Sound colonies were incubated.

Several other scattering pairs were seen on the small keys and banks in Pamlico Sound, and the birds were seen daily during our visit there. These colonies have greatly increased during the last few years, due to the activities of the North Carolina Audubon Society, which has provided a warden to watch them.

8. *Hydrochelidon nigra surinamensis*. BLACK TERN.—Rare and accidental in Pamlico Sound, where two individuals were seen, one on Royal Shoal June 25, and the other on Miller Lump off Buxton on the same date. I could not find that it breeds.

9. *Rynchops nigra*. BLACK SKIMMER.—Abundant in suitable locali-

ties along the coasts and shallow bays of both North and South Carolina, breeding where found. This bird was seen daily June 10–15 around Bulls Bay, S. C., and June 24–29 in Pamlico Sound, N. C. The birds are late breeders. In the largest colony found, of some 1,000 birds, on Vessel Reef, Bulls Bay, the birds had just started laying, one and two eggs being laid; on Royal Shoal June 24, the nests had 3 or 4 eggs, and one was found with 5 slightly incubated. No young were seen in any colony visited.

10. **Phalacrocorax auritus floridanus.** FLORIDA CORMORANT.— A large colony of a cormorant ascribed to this species was found breeding at Great Lake, Jones County, N. C. The birds were nesting in a group of yellow pines on the edge of the lake, the nests being situated from 15 to 75 feet from the ground. On the date visited, June 18, all the nests but one had young in various stages of growth, from newly hatched to almost full-fledged. One nest contained 3 eggs advanced in incubation. One hundred and twenty-three used nests were found. Mr. Pearson tells me that this colony, which has been at the lake for some years, is slowly decreasing.

11. **Pelecanus occidentalis.** BROWN PELICAN.— Not uncommon a few miles north of Charleston, S. C. (Bulls Bay), where on June 12 over five hundred birds were seen. Said to breed near Bulls Bay, but we could not find the breeding place.

Casual in Pamlico Sound, N. C. On Legged Lump, in the sound, on June 28, four birds were seen roosting on a sand spit. Not known to breed.

12. **Anas boschas.** MALLARD.— Very rare at Lake Ellis, N. C., in summer. One was seen by Mr. Abbott at the lake June 18. The remains of a duck of this species, partially eaten by minks, was found in the marsh around Ellis Lake; probably a wounded bird unable to leave in the spring.

13. **Aix sponsa.** WOOD DUCK.— Abundant at Ellis Lake, N. C., where it breeds in the big gum timber around the lake. Seen daily, singly or in pairs; on one occasion a flock of six was noted. Common also on the Hatteras Banks at Buxton, where it breeds.

14. **Ixobrychus exilis.** LEAST BITTERN.— Abundant at Ellis Lake, N. C., where it breeds in the thick growth of wild rice and rushes around the lake. Four nests were found, June 16–20, one of which had five well grown young, and two others eggs advanced in incubation; one nest had one fresh egg.

15. **Ardea herodias.** GREAT BLUE HERON.— Occurs abundantly in the marshes of the Sea Islands, S. C., where seen June 10, feeding in the salt creeks and ponds. Not found breeding there.

Abundant at Great Lake, Jones Co., N. C., where it breeds. Seen June 18 and 20. At this date all the young had hatched and some were as large as the old birds. In one cypress tree at the lake, not twenty feet high, were eleven used nests. In another cypress, two nests with grown young were noted and four other scattering nests.

16. **Herodias egretta.** AMERICAN EGRET; LONG WHITE.— A small

flock of this heron was seen daily June 16–20 at Ellis Lake, N. C., feeding in the marshes around the lake. Not known to breed, although reported by Mr. Brimley as seen during the probable breeding season.

17. *Egretta candidissima*. SNOWY EGRET.—About 50 pairs of this egret were found in a large heron rookery visited June 10 at Secessionville, S. C. The birds were breeding in company with other herons, and had succeeded in raising many young, which were scrambling about in the bay bushes. Seven nests with eggs were found, which were advanced in incubation. This rookery had been raided by plumers, and several piles of egret bodies, denuded of plumes, were found among the bushes.

18. *Hydranassa tricolor ruficollis*. LOUISIANA HERON.—This heron was breeding in large numbers at the rookery at Secessionville, S. C., the number being estimated at 300 pairs. On June 11, there were both young and eggs, many of the young being fully fledged. The nests were in low bay bushes, from 8 to 15 feet from the ground.

19. *Florida cærulea*. LITTLE BLUE HERON.—Two nesting colonies were found. One, at Secessionville, S. C., where about 100 pairs were breeding in bay bushes with other herons, was visited June 10. The nests held both eggs and young, many of the latter being able to fly, and all the eggs were advanced in incubation. The nests were in low bay bushes, 8 to 10 feet from the ground. The other colony was situated at Great Lake where sixteen nests containing fresh eggs were found June 18, in some low bushes around the edge of the lake. These eggs were later destroyed by Fish Crows.

20. *Butorides virescens*. LITTLE GREEN HERON.—Very abundant in a heron rookery visited June 10 and 11 at Secessionville, S. C., where it was breeding with several other larger herons. Here were found about 200 pairs, which for the most part had young in various stages of growth; a few eggs were found advanced in incubation. Another colony was found on Grimble Island, June 14, where about 50 occupied nests were seen.

21. *Nycticorax nycticorax nævius*. BLACK-CROWNED NIGHT HERON.—About 30 pairs were found in the heron rookery at Secessionville, S. C., June 10 and 11, where we noted eggs and young in various stages of growth, many of the latter having left the nests. At Great Lake, Jones County, N. C., two nests with well grown young were found June 18. Nowhere as common as the other herons.

22. *Rallus elegans*. KING RAIL.—Common at Ellis Lake, N. C., where it breeds in the wet, reedy marshes around the lake. The bird was seen or heard daily June 16–20. A nest found June 16 contained 10 eggs advanced in incubation. This nest was placed in a thick patch of rushes in a wet part of the marsh, and the rushes were arched over the eggs, a typical situation.

23. *Rallus crepitans*. CLAPPER RAIL.—Very abundant in the extensive salt marshes around Charleston Harbor and Bulls Bay, S. C., where it was seen or heard daily June 10–15. One nest, with four fresh eggs, was taken June 14 on St. James Island, S. C. Several empty nests, apparently used, were found June 12 in the marsh behind Raccoon Key, Bulls Bay, S. C.

24. **Gallinula galeata.** FLORIDA GALLINULE.—Rare and unusual at Lake Ellis, N. C. One nest was found in a wet part of the marsh at the lake on June 21, which contained four eggs on the point of hatching. No other nests were found, nor other birds seen. Mr. H. H. Brimley tells me that this nesting record is a new one for the State.

25. **Tringa canutus.** KNOT; ROBIN SNIPE; FOOL-BIRD.—Very common on the beaches and keys of Bulls Bay, S. C., where several flocks were seen June 12 and 13, particularly on Vessel Reef, Bird Island Shoal, and Raccoon Key.

26. **Pisobia minutilla.** LEAST SANDPIPER.

27. **Ereunetes pusillus.** SEMPALMATED SANDPIPER.

Several flocks of small sandpipers, which probably included both these species, were seen on Bird Island Shoal, Bulls Bay, S. C., June 12, and on Legged Lump in Pamlico Sound on June 28. None were collected.

28. **Catoptrophorus semipalmata.** WILLET.—Very common on Raccoon Key, Bulls Bay, and on Morris and St. James Islands, S. C., where the birds were seen June 10–15.

The largest colony found was on Raccoon Key, where nests were found. The Willet builds quite a nest of bits of drift and dried seaweed, usually on the ground in a bunch of the black grass. Two nests found were in such position; one contained one egg and the other three, all fresh. The birds here had been badly persecuted by Fish Crows and minks; broken and sucked eggs were found everywhere, and two nests were found in which the skeleton of the bird was lying on sucked eggs, the work of minks.

The Willet is the most striking bird of the region, and is the noisiest. One cannot approach their haunts without one or more coming to greet him with shrill cries. Flying around close to one, they scream and shriek, hovering with trembling wings and open beak. They seem to make as much noise when away from their nest as when near it, and give no indication of its location. A beautiful species, characteristic of the southern marshes and beaches.

29. **Numenius longirostris.** LONG-BILLED CURLEW; JACK CURLEW.—A flock of six was seen June 12 on Bird Island Shoal, Bulls Bay, S. C., feeding with other shore birds.

There is a persistent idea among the fishermen and baymen of the region that this species breeds here; we did not find a nest, however, and did not hear of any nest ever being found.

30. **Ochthodromus wilsonius.** WILSON'S PLOVER.—Very common among the islands and along the sandy beaches off the South Carolina coast, being especially abundant on Raccoon Key, Bulls Bay, S. C. This plover was seen daily June 10–15. Nests were found June 10–12 on Morris Island and Raccoon Key. Of six nests, five had three eggs each and the other two, all fresh. The eggs are laid among the shells in shallow hollows, and are very hard to find. The birds fool one repeatedly, squatting down among the shells as if on eggs when far from the nests, and seldom disclose their location.

31. ***Arenaria morinella***. TURNSTONE.—Three birds of this species were seen on Bird Island Shoal, Bulls Bay, S. C., on June 12. The birds were feeding in company with some other shore birds, and were very tame, allowing a close approach.

32. ***Hæmatopus palliatus***. OYSTER-CATCHER; SEA CROW.—Common in suitable locations along the North and South Carolina coasts, breeding where found. These birds were seen all around Charleston Harbor and Bulls Bay, S. C., June 10–15, and at Royal Shoal, Pamlico Sound, N. C. Nests were found June 12 on Vessel Reef, Bulls Bay, one with two eggs and one with one, fresh; another nest was found on Raccoon Key, Bulls Bay, with two eggs slightly incubated.

33. ***Zenaidura macroura carolinensis***. MOURNING DOVE.—Common on St. James Island, S. C., where several were seen June 15. One was seen in the oak scrub near Beaufort, N. C. No nests were found.

34. ***Chæmepelia passerina terrestris***. GROUND DOVE.—One pair was seen by Mr. Abbott on St. James Island, June 15.

35. ***Cathartes aura septentrionalis***. TURKEY VULTURE; TURKEY BUZZARD.—Very abundant around Charleston, S. C., and all throughout the Sea Islands, around Lake Ellis, and on the Hatteras Banks. Seen almost daily June 10–28. Several were noted around the heron rookery at Secessionville, S. C. Common in the Market Place at Charleston.

36. ***Catharista urubu***. BLACK VULTURE; CARRION CROW.—Very common around the Sea Islands, and in and about the city of Charleston, S. C., where they may be seen daily in the Market Place. A large flock of some 25 birds was seen June 15 on St. James Island, S. C., where there was a roost.

Casual at Ellis Lake, N. C., one bird being noted there June 18.

37. ***Elanoides forficatus***. SWALLOW-TAILED KITE.—Rare but regular at Lake Ellis, N. C., where on June 18 a male of this species was noted. Mr. H. H. Brimley tells me that one or more of these birds are seen each summer at the lake. I could not find that it bred there.

38. ***Buteo lineatus***. RED-SHOULDERED HAWK.—Common at Lake Ellis and Great Lake, N. C., where it was seen or heard daily June 16–20. One was seen at Buxton on the Hatteras Banks June 27. Mr. H. H. Brimley tells me they breed around Lake Ellis and Havelock, N. C.

39. ***Falco sparverius***. SPARROW HAWK.—One seen by Mr. Abbott near Havelock Station, N. C., June 26.

40. ***Pandion haliaëtus carolinensis***. OSPREY; FISH HAWK.—Abundant at Lake Ellis and at Great Lake, N. C., where there is a large breeding colony. On June 20, thirty occupied nests were counted around Great Lake, which had young in them of various stages of growth, many being ready to fly. One nest held three young, but two was the usual number. Some of the nests were huge structures; all were in cypress trees, usually out in the lake itself, and from fifteen to fifty feet above the water.

41. ***Strix varia***. BARRED OWL.—Not a common resident at Lake Ellis. The hoot of the owl was heard near camp on June 17 and 20. Said to breed in the heavy sweet gum timber around Great Lake.

42. **Otus asio.** SCREECH OWL.— Heard nightly around camp at Ellis Lake, June 16–20, a bird having a roosting place in a sweet gum directly over the camp. Said to breed.

43. **Bubo virginianus.** GREAT HORNED OWL.— Not common around Lake Ellis, N. C. One was seen by Mr. Abbott June 18, in the heavy timber around Great Lake, N. C. Not found breeding there. "Seen more commonly in the colder months" (Brimley).

44. **Coccyzus americanus.** YELLOW-BILLED CUCKOO.— Common at Lake Ellis, N. C. Heard and seen daily June 16–20, in the sweet gum thickets near camp. No nest was found, "but the species breeds" (Brimley).

45. **Ceryle alcyon.** BELTED KINGFISHER.— One bird seen June 16 at Newberne, N. C. "Common in eastern North Carolina, breeding in suitable localities" (Brimley).

46. **Dryobates villosus.** HAIRY WOODPECKER.— Not common at Lake Ellis, N. C. This species was recorded by Mr. Abbott as occurring in the heavy timber between Ellis and Great Lakes, where it was seen June 18. Another was seen feeding on a dead pine stump near Havelock, N. C., June 16.

47. **Dryobates pubescens.** SOUTHERN DOWNY WOODPECKER.— Common at Lake Ellis, N. C. Recorded by Mr. Abbott June 17 and 18 near camp at the lake, and in the woods at Great Lake. No nests were found, but Mr. H. H. Brimley tells me it is a common nesting bird.

48. **Phlœotomus pileatus abieticola.** NORTHERN PILEATED WOODPECKER.— Rare around Lake Ellis, N. C. A bird ascribed to this species was seen by Mr. Abbott in the large sweet gum timber between Lake Ellis and Great Lake on June 18.

49. **Melanerpes erythrocephalus.** RED-HEADED WOODPECKER.— Not uncommon at Lake Ellis, N. C., "where it breeds" (Brimley). Mr. Abbott saw this species at camp on Lake Ellis June 17, and in the woods at Great Lake June 18.

50. **Antrostomus carolinensis.** CHUCK-WILL'S-WIDOW.— Rare around Lake Ellis, N. C. Mr. Bowdish records an individual which he heard calling in a bit of timber near the Havelock Station, N. C.

51. **Chordeiles virginianus.** NIGHT HAWK; BULL BAT.— Not uncommon among the Sea Islands, S. C. A pair of this species was seen June 12 on Raccoon Key, Bulls Bay, and another on St. James Island, S. C., June 15. They breed, but we found no nests. A single bird was seen by Mr. Bowdish at Havelock Station, N. C., June 18.

52. **Archilochus colubris.** RUBY-THROATED HUMMINGBIRD.— One seen by Mr. Abbott on June 20, on the road between Havelock and Lake Ellis, N. C.

53. **Chætura pelagica.** CHIMNEY SWIFT.— Common around Charleston, S. C., and at Ellis Lake, N. C.; at the latter place a nest with four eggs was taken June 17, from an old chimney flue in the roof of our camp. In the Great Lake woods several birds were seen diving into a huge dead gum tree.

54. **Tyrannus tyrannus.** KINGBIRD; BEEBIRD.—Common on St. James Island, S. C., and at Havelock and Ellis Lake, N. C., breeding abundantly in both localities. Nests were found at St. James Island June 14, and at Havelock June 17 and 18, with fresh eggs.

55. **Myiarchus crinitus.** CRESTED FLYCATCHER.—One seen by Mr. Abbott at Lake Ellis, June 18.

56. **Myiochanes virens.** WOOD PEWEE.—Common around Havelock and at Lake Ellis, where it breeds. A nest was found at Havelock 60 feet up in a huge yellow pine, on which the bird was sitting on June 16. Other birds were noted by Mr. Abbott at Lake Ellis, June 17 and 20.

57. **Empidonax virescens.** ACADIAN FLYCATCHER.—One recorded by Mr. Abbott as seen along the brushy bank of a canal at Ellis Lake, N. C., on June 18.

58. **Cyanocitta cristata.** BLUE JAY.—Common at Ellis Lake, N. C., where it was seen daily June 16–20, especially in the pine timber surrounding the lake.

59. **Corvus brachyrhynchos.** AMERICAN CROW.—Not uncommon in the heavy pine and sweet gum timber around Ellis Lake. June 19 and 20 several were heard by Mr. Abbott.

60. **Corvus ossifragus.** FISH CROW.—Abundant around Charleston, S. C., and on the neighboring beaches and marshes; at Lake Ellis, and at and near Beaufort, N. C., and on the Hatteras Banks in Pamlico Sound, this bird was seen almost daily during the trip, June 10–28. Especially common at Bulls Bay, S. C., and at Great Lake, N. C. They breed where found, but the young at this date were on the wing.

This bird is very destructive to the various colony nesting birds. In one instance, noted at Great Lake, all the eggs in a Little Blue Heron colony of some sixteen nests had been destroyed. At Bulls Bay many Willet's eggs were found sucked clean, and some eggs of the Least Tern and Wilson's Plover.

61. **Agelaius phoeniceus.** RED-WINGED BLACKBIRD.—Abundant at St. James Island, S. C., and at Ellis Lake, N. C., breeding in both localities. Nests were found almost daily at Ellis Lake, June 16–20, with eggs or young. One pair was seen at Buxton on the Hatteras Banks June 27.

62. **Sturnella magna.** MEADOWLARK.—Not uncommon in the open fields between Havelock and Lake Ellis, N. C. Seen by Mr. Abbott June 18.

63. **Icterus spurius.** ORCHARD ORIOLE.—Common at Ellis Lake, N. C. Particularly noted June 17, when a nest was found, and on June 19 around camp at the lake. One bird seen in an orchard on St. James Island, June 15.

64. **Quiscalus quiscula.** PURPLE GRACKLE.—Noted by Mr. Abbott June 19, at Lake Ellis, N. C.

65. **Megaquiscalus major.** BOAT-TAILED GRACKLE.—Very abundant among the Sea Islands, S. C., where it breeds in large colonies. A colony found on a small island in the salt marsh near Secessionville, S. C., comprised hundreds of pairs. At the time it was visited, June 10 and 11,

many young were on the wing and nearly all the eggs had hatched. Two or three nests were found, with one or two fresh eggs, and one nest with three fresh eggs.

66. **Spizella pusilla.** FIELD SPARROW.— Common at Ellis Lake, N. C., where it was seen daily June 16–20.

67. **Pipilo erythrophthalmus.** TOWHEE; CHEWINK; GROUND ROBIN.— Common among the Sea Islands, S. C., and at Lake Ellis, N. C. Particularly noted June 15 on St. James Island, where a pair with a brood of young were seen. Seen daily among the blackberry patches around camp at Ellis Lake, June 16 to 20.

68. **Cardinalis cardinalis.** CARDINAL.— Common at the Sea Islands, S. C.; at Ellis Lake, and on the Hatteras Banks, N. C. On June 15, a nest with three partially grown young was found on St. James Island. Seen or heard daily at Lake Ellis, June 16–20, and on June 27 at Buxton, N. C.

69. **Passerina cyanea.** INDIGO BUNTING.— Common at Ellis Lake, N. C., where it was seen daily in the blackberry and cat-briar thickets near camp, June 16–20. No nests were found, but Mr. H. H. Brimley tells me that it breeds commonly.

70. **Passerina ciris.** NONPAREIL.— Very common on St. James Island, S. C., where on June 15 three singing males were noted. No nests were found, though Mr. Grimble, who owns the island, tells me that they are common breeders there.

71. **Progne subis.** PURPLE MARTIN.— Abundant in and around Charleston, S. C., and at Newberne and at Lake Ellis, N. C. Seen daily June 10–20, and particularly noted on June 17 at Newberne, where a large colony was nesting; many of the birds had well grown young. A typical bird of the South, seen everywhere; scarcely a house is without its little martin house, and all are occupied by breeding birds.

72. **Riparia riparia.** BANK SWALLOW.— Uncommon and unusual during the summer in the Sea Islands, S. C. Two were seen by Mr. Abbott on St. James Island, June 15.

73. **Lanius ludovicianus.** LOGGERHEAD SHRIKE; BUTCHER BIRD.— Not common among the Sea Islands, S. C. On June 15, a nest was found on St. James Island, containing five eggs.

74. **Vireosylva olivacea.** RED-EYED VIREO.— Not common at Ellis Lake, N. C. One was seen by Mr. Abbott June 17. Several others were heard singing in the gum trees around the camp.

75. **Vireosylva gilva.** WARBLING VIREO.— Fairly common at Lake Ellis, N. C., where it was seen and heard daily in the small groves of sweet gums around the camp, June 16–20.

76. **Vireo griseus.** WHITE-EYED VIREO.— Not common at Ellis Lake, N. C. Only one bird was seen, recorded by Mr. Abbott June 18 at camp.

77. **Mniotilta varia.** BLACK AND WHITE WARBLER.— Not uncommon at Ellis Lake, N. C. While only one bird was seen (recorded by Mr. Bowdish), Mr. Brimley tells me that it breeds sparingly in the woods around the lake.

78. **Protonotaria citrea.** PROTHONOTARY WARBLER.— Fairly common at Great Lake, Jones Co., N. C., frequenting old cypress stumps draped with moss, which afford good feeding and nesting places. On both visits to the lake, June 18 and 20, several were seen, and on June 20 a nest was found in a rotten cypress stump, standing out in the lake; the nest was placed in a deep hollow formed by the breaking off of a limb. The nest contained two fully fledged young, which attempted to leave the nest when disturbed. At the dates seen the male birds were in full song.

79. **Helinaia swainsoni.** SWAINSON'S WARBLER.— Rare around Ellis Lake, N. C. I am able to add a breeding record of this rare warbler from eastern North Carolina. On June 18, a pair of these warblers feeding large young were seen in the low undergrowth of the heavy gum timber between Great Lake and Ellis Lake. These young birds must have been hatched in the near vicinity of the lake, as they were unable to fly. Along the edge of Ellis Lake and along Great Lake, are several large patches of tall canes, making a fine breeding place. An extensive search in these canes would perhaps have revealed more of these warblers, as others were heard singing by Mr. Bowdish and Mr. Abbott.

80. **Compothlypis americana.** PARULA WARBLER.— Very common around Lake Ellis, N. C., where it was seen daily June 16–20, in the moss-draped gum trees near the camp. No nests were found, but Mr. H. H. Brimley tells me it is an abundant breeder.

81. **Dendroica dominica.** YELLOW-THROATED WARBLER.— Very common in the pine woods at Lake Ellis, N. C., where it was seen daily June 16–20. On June 16 a pair with a brood of young were seen by Mr. Abbott. They are early breeders, and no nests were found. One male was taken June 19.

82. **Dendroica vigosii.** PINE WARBLER.— Uncommon at Ellis Lake, N. C. Only one bird was seen, June 17, near camp.

83. **Dendroica discolor.** PRAIRIE WARBLER.— Seen only in the oak scrub near Beaufort, N. C., where on June 23 a female was seen feeding a full grown young one. Mr. H. H. Brimley states that they are common in the locality.

84. **Seiurus aurocapillus.** OVENBIRD.— Uncommon at Lake Ellis. A bird was seen on the road to Havelock June 16, singing.

85. **Geothlypis trichas.** MARYLAND YELLOWTHROAT.— Common among the Sea Islands and on Raccoon Key, Bulls Bay, S. C., where it was seen June 12–15. Common at Havelock and Lake Ellis, being noted June 18.

86. **Wilsonia mitrata.** HOODED WARBLER.— Apparently not common in eastern North Carolina, at least in the localities visited by us. At Ellis Lake one nest was found June 20, containing three eggs ready to hatch. A male of this species was seen in a wet place in the scrub oak near Beaufort, N. C., but no nests were found there.

87. **Mimus polyglottos.** MOCKINGBIRD.— Very common around Charleston, S. C., on the Sea Islands, at Beaufort, and at Lake Ellis. Nests were found June 15, with three and four eggs; incubation advanced.

88. **Dumetella carolinensis.** CATBIRD.— Common at Lake Ellis, N. C. Seen daily June 16 to 20, on which latter date a nest and eggs was found by Mr. Abbott. Seen June 27 at Buxton, on the Hatteras Banks.

89. **Toxostoma rufum.** BROWN THRASHER.— Common at St. James Island, S. C., and at Ellis Lake, N. C., being seen in the thickets near camp June 18 and 19. A newly built nest was found on St. James Island June 15, which had not been laid in.

90. **Thryothorus ludovicianus.** CAROLINA WREN.— Common in suitable localities in the Sea Islands and at Lake Ellis, N. C., breeding in both places. Birds were seen June 15 on St. James Island, and daily June 16–20 around our camp at Lake Ellis. Here a freshly constructed nest was found June 19.

91. **Telmatodytes palustris.** LONG-BILLED MARSH WREN.— A marsh wren was very common in the marshes around Bulls Bay, S. C., and the rookeries on Secessionville and St. James Island. Seen and heard June 10, 11 and 15. None was collected, and the form is doubtful. No nests were found and no young seen.

92. **Sitta carolinensis.** WHITE-BREADED NUTHATCH.— Reported as a common breeding bird around Lake Ellis, N. C., by Mr. H. H. Brimley. Only one was seen during our visit, being recorded by Mr. Abbott on June 18 near camp.

93. **Sitta pusilla.** BROWN-HEADED NUTHATCH.— Seen only in the oak scrub on the outskirts of Beaufort, N. C. Here one was seen June 23 by Messrs. Abbott and Bowdish, feeding on a dead pine stump.

94. **Bæolophus bicolor.** TUFTED TITMOUSE.— One was seen by Mr. Abbott in the woods around Lake Ellis, N. C., June 18. Several others were heard calling in the low wet timber between Lake Ellis and Great Lake on June 18 and 20. No nests or young were found or seen.

95. **Penthestes carolinensis.** CAROLINA CHICKADEE.— Seen June 18 and subsequently, by Mr. Abbott, at and around Ellis Lake, N. C. Not common.

96. **Hylocichla mustelina.** WOOD THRUSH.— “Common and breeds at both Great Lake and Ellis Lake, N. C.” (Brimley). One seen and several others heard singing in the dark, heavy timber around Great Lake, June 18 and 20.

97. **Sialia sialis.** BLUEBIRD.— Abundant and breeds at Ellis Lake, N. C. (Brimley). One was seen June 18 by Mr. Abbott near our camp at the lake.

98. **Colinus virginianus.** QUAIL; BOBWHITE.— Common on St. James Island, S. C., where a brood of young was found on June 15 in a grass-grown orchard near the plantation house. Common and breeds at and around Havelock and Ellis Lake, N. C. Seen and heard daily June 16–20.

99. **Passer domesticus.** ENGLISH SPARROW.— Seen on St. James Island, S. C., on June 15, around the plantation house. Not seen at Havelock or Ellis Lake, N. C., which appear to be among the few places it has not yet reached.