

five or six from the trunk. We took a set of three on May 30. This nest was small, but better made than the previous one. The eggs contained small embryos.

All of the foregoing were found in a fifty-acre tract of pine woods. The following nests were found in mixed woods.

12. April 14, I found a nest just started in a tall, very thin pine some 50 feet high; a heavy rain came next day and the nest was deserted.

13. April 24, I found this pair re-building in a huge pine not far from the first, the nest some 90 feet high and 15 from the trunk. I did not trouble that pair any more.

BIRDS FOUND BREEDING ON SEVEN MILE BEACH, NEW JERSEY.

BY CHARLES S. SHICK.

ABOUT five years ago one of the richest ornithological fields open to collectors was Seven Mile Beach in Cape May County, New Jersey, a beautiful island, over seven miles long and from a quarter of a mile to a mile wide, densely covered with cedar, oak, pine, holly, sassafras and birch trees, nearly every one of them covered with long, rich pendants of *usnea* moss. The natural advantages offered here for nest building are unsurpassed.

I have watched the encroachments of man year after year, until now, to cap the climax, a seashore resort has been started and the axe of the woodman is clearing away many of the fine old trees on which the Fish Hawks formerly built their homes. In a few years more this island, which five years ago was the collector's paradise, will no longer be frequented by many birds that now summer there. I give a list of birds breeding there at the present time.

Larus atricilla. LAUGHING GULL.— During my eight years residence in South Jersey I have found this bird breeding abundantly each summer. On Gull Island, near Hereford Inlet, at the southern point of Seven Mile Beach, a vast colony congregates every year. Early in May and again about June 2 full sets of eggs can be found. The nests are built of sedge

grass, generally along the border of a salt pond. They are also known by the name of Black-headed Gull.

Gelochelidon nilotica. GULL-BILLED TERN.—A rather common visitor. Breeds on the meadows and sand flats at the southern point of the island. I have found it breeding in company with *Larus atricilla*. Mr. Harry G. Parker has also taken eggs in the same locality.

Sterna forsteri. FORSTER'S TERN.—Not as common as either of the above. It was formerly very abundant. It associates with *Sterna hirundo*.

Sterna hirundo. COMMON TERN.—Very common, breeding on sand flats and along the beach, out of reach of the tide. I have taken many sets of eggs each year. 'Sea Swallow' and 'Summer Gull' are two of the local names.

Sterna dougalli. ROSEATE TERN.—Breeds in company with the Common Tern, from which its eggs cannot with certainty be distinguished. They are not nearly as plentiful as they were five years ago, when it was an easy task to go out and gather several bushels of eggs in a few hours.

Sterna antillarum. LEAST TERN.—A very common breeder. I have taken eggs every year since 1882. I must state, however, that all of the Terns are gradually forsaking their former breeding grounds on account of the new seaside resorts that are being started on all the islands. Formerly many hundred pairs occupied a small sand flat near Sea Isle City, but they are now all gone, not one pair breeding where a few years ago hundreds raised their young.

Rynchops nigra. BLACK SKIMMER.—Breeds, but not very commonly. Several years ago I could go out during the breeding season and take all the sets I desired; they are very scarce now. Residents throughout Cape May County call this bird 'Shearwater,' 'Razorbill,' and 'Broadbill.'

Ardea coerulea. LITTLE BLUE HERON.—A few pairs still hold out in a thick grove of cedar trees on the lower part of the island. Capt. William Sutton, an old resident in this locality, informs me that in former years, there was a large heronry on this beach, which the residents of the mainland would visit every spring, when they would secure hundreds of their eggs. He stated that even after taking large basketfuls, one could not notice a diminishing of nests. He was confident that several thousand pairs occupied the lower end of Seven Mile Beach. 'Booby' is its most common name in this locality.

Ardea virescens. GREEN HERON; 'SQUAWK'; 'FLY-UP-THE-CREEK'; 'BOOBY.'—It is very abundant and at any time after May 10 can be found in the deep woods, along the edge of the meadows, and even on the beach in search of food. It nests in low bushes, within a foot of the ground, and in trees fifty feet from terra firma. Its nest is built in a very slovenly fashion, and in many cases I have counted the three or four pale green eggs from the foot of the tree. This season I took many fine sets of three and four eggs each.

Nycticorax nycticorax nævius. BLACK-CROWNED NIGHT HERON.—Not common. Breeds in small colonies among the cedar trees near swamps.

Rallus longirostris crepitans. CLAPPER RAIL.—This is one of the

most common birds to be found here. Every small creek has its dozen or more Clapper's nests along its banks in the high sedge grass. It is quite easy to secure several hundred eggs in a day. The largest set I ever took, was found here on Seven Mile Beach and contained thirteen eggs. I know certainly that the Clapper Rail remains here through the winter, for several times in January and February of this year I flushed the birds while walking the meadows in search of Ducks. My dog also flushed several on different occasions. They bear the local name of 'Mud Hen.'

Symphemia semipalmata. WILLET.—Rather common. Found breeding late in May and early in June on the salt marshes adjacent to the main island. Last year I found two sets of four eggs each, among a colony of Laughing Gulls on Gull Island. They are not as numerous as they were formerly.

Actitis macularia. SPOTTED SANDPIPER.—This beautiful wader is found abundantly all over the island. Its *peet, peet, peet-weet* can be heard from every quarter. It breeds in the higher parts of the island, generally on a sandy knoll in the high, rank sedge grass.

Ægialitis meloda. PIPING PLOVER.—The dull, mournful, single note of this bird can be heard at any hour of the day along the beach. It has a habit, if you approach its nest, of leaving it before you come within several hundred feet. Running along the ground in front of you, it will not readily take wing. I have walked several miles along the beach with a Piping Plover in front of me all the way. On this island it breeds in very moderate numbers. Mr. Harry G. Parker took a number of sets last season along the beach shingle, out of the reach of the tide.

Pandion haliaëtus carolinensis. AMERICAN OSPREY.—Very common. Since 1884 it has been gradually becoming scarcer each year. I know that in 1884 fully one hundred pairs occupied nests in every part of the island, while this year not more than one fourth of that number remain. Their usual complement of eggs is three, while sets of two and four are not uncommon.

Syrnium nebulosum. BARRED OWL.—Probably breeding. On May 10 I flushed a pair from a clump of cedar trees and they flew away to another clump some distance off. I searched for the nest in vain. Mr. Harry G. Parker found these birds in the same place a few days later.

Ceryle alcyon. BELTED KINGFISHER.—I found a nest in a hollow stump in the summer of 1886, and from the appearance of the cavity am sure it was occupied by a pair of Belted Kingfishers that were in the vicinity all summer.

Tyrannus tyrannus. KINGBIRD.—This bird is comparatively common, and in June can be found breeding in every clump of cedar trees on the island. It raises two broods every year.

Contopus virens. WOOD PEWEE.—This is one of the rare birds here, but a few pairs rear their young on the island. On the mainland they are common.

Corvus americanus. AMERICAN CROW.—Quite common, breeding abundantly on the outer edge or strip of cedars near the meadows.

Corvus ossifragus. FISH CROW.—Though not as numerous as *Corvus americanus*, this Crow is not to be classed as rare. It breeds abundantly in May in the clumps of cedar trees near the beach. On May 16 Mr. Harry G. Parker found a number of sets of eggs in a grove of cedars near the Seven Mile Beach Life-saving Station. Incubation was but slightly advanced. My notes on the Fish Crow in the 'Bay State Oölogist' for March, 1889, were wrong, as the Crow I found breeding on Peck's Beach in April was not the Fish Crow, but *Corvus americanus*. The breeding time of the Fish Crow is from the 5th to the 25th of May. Fresh eggs can be found early in May.

Molothrus ater. COWBIRD.—I have taken a number of sets of Chipping Sparrow's nests containing single eggs of this bird, and I have also found their eggs in the nests of Song Sparrows.

(To be continued.)

NOTES ON HABITS AND NESTING OF *VIREO FLAVOVIRIDIS* (CASS.).

BY GEORGE K. CHERRIE.

AT SAN JOSE, Costa Rica, the Yellow-green Vireo (*Vireo flavoviridis*) is not a permanent resident, disappearing at the beginning of the dry season together with the Red-eyed Vireo (*Vireo olivaceus*), which latter bird is seen only for a very short time and is very rare as it passes on its journey south. The last record I have of *V. flavoviridis* for 1889 is that of the night of September 28, when, in company with seven other species of North American birds—none of which are found within the limits of Costa Rica during the breeding season,—they rushed, in terrified groups, to death, bewildered by the electric lights. The bodies of those picked up the following morning, and for some three weeks previous, were noted as being extremely fat, a thing that had not in any way attracted my attention previous to the migration.

By April 10 they are quite common, and on April 24, 1889, I saw one carrying nesting material. At this season they are almost always seen in pairs, and apparently have a pent up supply of song that is liable to burst forth at almost any moment, wherein they differ from their near relatives, *V. olivaceus*, which at this