BIRD NOTES FROM SOUTHERN FLORIDA.

BY BAYARD H. CHRISTY.

The immediate delight for the bird-lover on a winter visit to Coconut Grove lies in the half familiar, half strange bird life about him. He walks out into the first morning, rejoicing through every sense, as one transported to the happy isles. The Mockingbird's song comes to him fragrant with orange blossoms; Blue Jays scream; a Catbird darts to cover; a Yellowthroat scolds. He notes the Warblers flitting in the live oaks,—Palm Warblers for the greater part, and Myrtles with them, and one or two Prairies. While he looks a Prairie Warbler sings its shrill ascending song. Presently from the mangroves at the water's edge the loud rolling call of a Wren attracts attention—Carolina—and yet not Carolina. Why that strangeness? And then with sudden realization the bird-lover exclaims happily to himself, "Why yes, of course! I should have known." And he waits to hear again the notes of a new acquaintance, the Florida Wren.

In the shade of the oleanders a feeding station has been established. A coconut in the husk has been split to serve as a food tray. A male Cardinal dashes up and alights on the rim, driving a female to a perch nearby. What a dazzling fellow! And the female too, See! Her breast is suffused with cardinal red. Here again is an old friend, but with a change—the Florida Cardinal.

To the same half coconut after a few minutes come two or three smaller birds; finches too of some sort, and strangely nondescript in plain olive-gray plumage. Then suddenly among them a marvel appears, a breath-taking, beautiful thing, a jewel of a bird, an enameled creature of intensest blue and vermillion and golden green. It is the male Nonpareil and those sober clad birds are his females. This exquisite finch is found about Coconut Grove in abundance, and because he is familiar and comes on invitation to the feeding stations, he is known well and made much of.

Along the shore of the bay move the water-birds,—Pelicans, Cormorants, Gulls, and Mergansers; overhead sails an occasional Man-o'War-Bird; Swallows hawk about—many Tree Swallows,

and perhaps a pair of Purple Martins. But the glory of the Florida bird world is the great, beautiful wading birds of the Everglades. To see them and to delight in them, one must travel far and endure some rough living,—no great hardship, if one comes with gusto to the undertaking.

Southern Florida lies like a wide shallow plate, holding within its rim Lake Okeechobee and the Everglades. The Everglades are but a continuation, a southward extension of the lake; they are its enormously wide, grass-grown margin. On three sides, to the north, to the east, and to the west, the rim of the plate is well defined, but to the south it is lost. Stream flow is from north to south, and over all the breadth of the Everglades there is a constant, gentle, imperceptible welling of potable sweet water. At the southern edge the outflowing fresh water meets the tide, and there over a strip ten or fifteen miles wide the water is brackish and cannot be drunk.

Of late years the project has gone forward of draining the region and reclaiming the land for agricultural purposes. Canals have been cut across the Everglades, through the rim of the plate, and across the coastal plain, and by these means the level of Okeechobee has been lowered some eight feet. Wide areas have been uncovered, but vastly wider areas continue under the widespread shallow flood. It is good to see to eastward of Lake Okeechobee rich black fields under cultivation; but it is pitiful to see fires raging over miles of wasteland,—fires which consume not the grass merely but the peaty soil itself, and leave nothing but desolate and sterile sand.

Where the drainage canals run there causeways are thrown up, and along these causeways automobile roads are in course of building. In the vicinity of the coastal towns the road surfaces are smooth, but the farther one drives the rougher they grow, until at length they are scarcely passable. The casual visitors turn back, and only they go on who have business ahead—road-builders, naturalists, and other such persons. A few hundred Seminoles move through the Everglades, as free in their dugouts and as surely at home as sea birds.

The Everglades, it will be remembered, are not an unbroken waste. The sea of grass is islanded with cypress swamps, with

hammocks of tangled shrubs and vines, and with pine grown ridges. To the west and north of Lake Okeechobee extends the higher, sandy Kissimmee prairie, with scattered forests of pine and cypress and cabbage palmetto.

The ensuing notes upon particular species of rarer birds were made by two of us, bird-lovers, who travelled together far and wide over southern Florida, between the 20th of February and the 5th of March, 1927. The greater part of the travelling was by automobile. Some remote places in the Cape Sable region were reached by canoe, and in that region we carried the canoe, lashed to framework on the machine.

We ran out from Miami on the Tamiami Trail, fifty miles westward across the Everglades; we ran southwestward seventy-five miles to Cape Sable; we ran northward to Palm Beach, thence westward to Lake Okeechobee, around the northern end of Okeechobee, and southward again to Immokalee and the edge of the Big Cypress. From Immokalee we turned to the west and ran to Ft. Myers on the Gulf coast. We returned across the state to Ft. Pierce, and turning southward followed the east coast back again to Coconut Grove. In all we travelled about nine hundred miles. We carried our food and, in the Cape Sable region, our water as well. We slept on the ground in one-man tents equipped with ground cloth and mosquito netting.

On the edge of the tropics there is no twilight to speak of. Stopping at five o'clock in the evening, we had scarcely time before dark to eat our supper and crawl into our tents; and though we rose at dawn, it was broad day before we could complete our simple round of breakfasting and striking camp. During one night we had a furious storm with torrents of rain, and the second night after, frost. For the rest, the weather was serene and the temperature equable. We suffered no hardship. Mosquitoes were not troublesome. We saw no rattlesnake, nor wished to. Water moccasins were abundant and we cautiously avoided them. We saw but one alligator. The two small mammals which we actually encountered happened both of them to be creatures of unusual interest: a mangrove fox squirrel (Sciurus niger avicennia Howell) seen in the mangrove forest near Cape Sable, and a round-tailed muskrat, which, since it is not a muskrat at all, Mr. Arthur H.

Howell proposes to call Everglade water-rat (Neofiber alleni nigrescens Howell). We found one of these animals lying dead on the road on the east shore of Lake Okeechobee. It had been run over by a passing car. The bird notes follow.

Colymbus holbælli. Holbælli's Grebe.—Running south from Ft. Pierce along the Indian River, we noted on March 4 not far from shore a single bird, and next morning a few miles beyond, two together.

Larus spp. The Gulls on Lake Okeechobee we found to be Herring (Larus argentatus) and Ring-billed (Larus delawarensis). Along the east coast there were Laughing Gulls (Larus atricilla) in greatest abundance, many Bonaparte's (Larus philadelphia) and a few Herring.

Sterna spp. There were large, Red-billed Terns both on Lake Ingram—a long brackish lake on the ocean plain to eastward from Cape Sable, and on the coast at Palm Beach,—Royal Terns (Sterna maxima) no doubt, and probably Caspian (Sterna caspia imperator) as well.

Pelecanus erythrorhynchos. White Pelican.—We saw a few of these great birds on the shallow brackish mangrove-fringed lakes in the Cape Sable region; at Lake Ingram a flock of nine flying in file. The breeding range of the species lies far away, in the northwestern states, and these were winter visitants. Their migration route extends presumably along the Gulf coast.

Anas f. fulvigula. FLORIDA DUCK.—Frequently met in the Everglades, and once on the west shore of Lake Okeechobee. Always in pairs. They have all the appearance of Black Ducks (Anas rubripes), except that the heads are of paler color. And this is a field mark which in good light may be noted even at considerable distance.

Anatidæ. The migrant Ducks which we noted were Baldpate (Mareca americana), a small flock in the Everglades; Green-winged Teal (Nettion carolinense), a few on Lake Okeechobee; Blue-winged Teal (Querquedula discors), abundant and widely distributed, in flocks, and often scattered in pairs; Shoveller (Spatula clypeata), small flocks in tide-water country; Pintail (Dafila acuta tzitzihoa), abundant and generally distributed; Lesser Scaup Nyroca affinis), the most abundant of all.

Guara alba. White Ibis.—These birds seemed not yet to be breeding. We found them in large flocks far out on the Everglades, where they were feeding in company with Herons of various species; and there we noted that the immature birds tended to flock apart from the adults. The species is plentiful too in the tide-water country. Few birds are more beautiful, few so distinctive in appearance. White bodies, black primaries, long coral red bills and long coral red legs. They fly in long oblique lines with outstretched and somewhat drooping neck and legs. The wing beats are rapid, and because of their black tips the wings have the appearance of having been clipped.

Mycteria americana. Wood Ibis.—They have a habit of flying in

companies. Twenty will maneuvre in unison, flapping, sailing, and wheeling with that flock unity which characterizes shore-birds; and because they are large birds and handsome, they afford at such times a beautiful and thrilling spectacle.

Ardea occidentalis. Great White Heron.—A few encountered singly, one in the Everglades, the others on the ocean plain east of Cape Sable. Their solitary habit is that of the Great Blue Heron.

Ardea herodias wardi. Ward's Heron.—Abundant. One was noted, perched by its nest in a low and leafless tree at the edge of a freshwater pond on the Kissimmee prairie.

An account of the "rookery" species will be given in a later paper, the additional species forming such assemblages consisted of the Anhinga (Anhinga anhinga), Florida Cormorant (Phalacrocorax a. floridanus), Egret (Casmerodius egretta), Snowy Heron (Egretta c. candidissima), Louisiana Heron (Hydranassa tricolor ruficollis), Little Blue Heron (Florida c. coerulea), Green Heron (Butorides v. virescens), and Black-crowned Night Heron (Nycticorax n. naevius).

Grus mexicanus. Sandhill Crane.—It was a great satisfaction to find these fine birds of fairly frequent occurrence. In the course of three days' running on the dry, sandy prairie to the northward and westward of Lake Okeechobee we noted fourteen birds in all. Usually we saw them in pairs; once, three together. Some of them were surprisingly tame—perhaps because they now are fully protected by law. Their strange, loud cry suggested to my companion the clatter of a block at a masthead. The extreme points where we observed them were, southward, five miles south of Immokalee; westward, on the Gulf coast near Ft. Myers; eastward, on the Indian River near Stuart.

Aramus v. vociferus. Limpkin.—We came on perhaps a dozen in all, in and near bushy islands in the Everglades, in pairs and in a small straggling company. We noted one in the tide-water country.

Rallidæ.—Of the Rails we saw the King Rail (Rallus elegans) in the Everglades, and heard the Clapper (Rallus longirostris scotti) on the shore of Biscayne Bay.

The Coot (Fulica americana) was an abundant bird on all inland waters, fresh and salt; the Florida Gallinule (Gallinula chloropus cachinnans) scarcely less so.

The Purple Gallinule (*Ionornis martinicus*) we found abundant enough, but at one place only, in waterways choked with water hyacinth, along the west shore of Lake Okeechobee, and there in association with the two other species named.

Limicolæ.—The most abundant shore-bird was the Kildeer (Oxyechus vociferus). We found it everywhere, usually in small flocks. In the Everglades we noted one Wilson's Snipe (Gallinago delicata) and the Yellow-legs of both species (Totanus melanoleucus and flavipes). On the mud flats of the Cape Sable region were Least and Semipalmated Sand-

pipers (Pisobia minutilla and Ereunetes pusillus), the lesser Yellow-legs (flavipes), a few Spotted Sandpipers (Actitis macularia), one or two Black-bellied Plovers (Squatarola squatarola), and a small flock of Semipal-mated Plovers (Charadrius semipalmatus). Along the Indian River we found the Sanderling (Crocethia alba).

Meleagris gallopavo osceola. FLORIDA TURKEY.—We were afoot, skirting the Big Cypress. In a grassy opening with scattered clumps of scrub palmetto some cattle ran before us, and presently there were two Turkeys, a gobbler and a hen, running before the cattle. When we returned from this expedition we found a state game warden in our camp, waiting for us. We congratulated him on his alertness, and perhaps our generous words were some compensation to him for having followed a profitless lead for fifteen miles.

Elanoides forficatus. SWALLOW-TAILED KITE.—At midday on March 2, at the edge of the Big Cypress, three passed overhead, flying together, at a height of about four hundred feet. They were travelling northwestward. They might have gone unseen, had not their high-pitched calls attracted our attention. In grace of form and motion and in their coloration of contrasting steel blue and white they have a suggestion of giant Swallows.

Buteo lineatus alleni. FLORIDA RED-SHOULDERED HAWK.—The most abundant of the Hawks. We found two nests, one on February 21 in a pine island in the Everglades, the other on March 3 at the edge of the Big Cypress. The parent bird after flying from the latter nest, returned with a grasshopper in her beak. There were young in the nest, no doubt.

Polyborus cheriway. Audubon's Caracara.—On the Kissimmee Prairie we saw a few, usually in pairs, and usually in or near islanded groups of cabbage palmetto. The Caracara is a large, conspicuous, black and white, loose flying bird, easily to be recognized. When seen near at hand and under the glass, the bare face and the great yellow beak with carmine base, forming a continuous curve with the forehead, are notably unique features.

Spectyto cunicularia floridana. FLORIDA BURROWING OWL.—The Burrowing Owl, the Caracara, and the Crane are birds of the Kissimmee Prairie. The burrows of the Owls are conspicuous in the grass and low palmetto scrub, because of the heaps of clean sand at their doors. And on each heap a pair of Owls stands perched. When approached they first bob uneasily and then fly, uttering a gentle reiterated note, and perch again on the open prairie. We came on a few pairs, and usually found at each particular station two or three pairs neighboring together. We remarked how high in the head the Owl's eyes are seated—a feature related perhaps to its terrestrial habit of life. In consequence, the bird has no forehead to speak of, and lacks that aspect of wisdom imputed to its family generally.

Phleotomus pileatus floridanus. Pileated Woodpecker.—Abundant in all heavy forests. We looked and listened in vain for the Ivory-

bill. To find him would require many days' searching, and we had the misgiving that even so we might have searched in vain.

Aphelocoma cyanea. FLORIDA JAY. A most interesting species, resembling the Canada Jay in that it lacks a crest, and resembling somewhat a Towhee in habit and in posture. Beautiful in its plumage of dove color and cobalt blue. We noted it frequently along the highway (often perched on a telegraph wire) from Stuart southward to the apparent limit of its range, about twenty-five miles below Palm Beach. Inland, we found a pair at Immokalee.

Ammospiza mirabilis. Cape Sable Seaside Sparrow.—It particularly interested my companion to discover whether this frail little creature whose habitat is contained within a few square miles, had outlived the great hurricane of September 1926, which had swept by with enormously great wind velocity and had carried a flood six feet deep over the whole ocean plain. And it was a marvel indeed to find it there in seemingly normal numbers.

Peucæa æ. æstivalis. Pine-woods Sparrow. We heard one singing at sunrise at our camp near Stuart on the east coast. The notes once heard are remembered, for they have a quality such as is found in those of the Hermit Thrush.

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