TEXAN BIRD HABITATS II.

BY C. W. G. EIFRIG.

Some time ago ('Auk,' Vol. XLVI, No. I, Jan. 1929) the writer related his impressions and experiences with birds during a visit to Texas in the summer of 1925. What he then saw determined him to return and delve a little more deeply into the wonderful avifauna of this great state. Accordingly, early in June 1926, he again set out for Texas, reaching Houston on the eighth of the month. As it turned out, the visit of 1925, interesting though it had been, was like the preface of a book compared to its content, compared to what was seen and observed on this second visit. For one thing, the year 1925 had been an exceptionally dry one, even for Texas, it not having rained for months, while 1926 was an exceptionally wet one. The differences produced by the changed weather conditions in certain bird habitats were altogether startling, well nigh unbelievable from a northern point of view, and such as would be quite impossible in the latitude of, let us say, Chicago.

Houston was made our first base of activity. From here trips were made in several directions, occasionally camping out overnight, with the sky as our blanket. To the north of Houston are found large stretches of original prairie, beginning right at the edge of the city, as yet unspoiled by the upheavals of "realtors" and "subdividers," so often seen on the outskirts of cities in the North. These prairies are crossed from east to west by bands of woodland, consisting mostly of loblolly pine. Our first trip was into this region, to Spring Creek, twenty miles north of Houston. Here Carolinian even Transition species preponderate, as witness this list: Red-eyed Vireo, Kingbird, Blue-gray Gnatcatcher, Yellow-billed Cuckoo, Tufted Titmouse, Cardinal, Purple Martin, Orchard Oriole, Cedar Waxwing, Crested Flycatcher, Dickcissel, Belted Kingfisher, Turkey Vulture, Bittern, Least Bittern, King Rail, and Killdeer. Also three Chimney Swifts were seen, as well as numerous Bronzed Grackles, Red-bellied Woodpeckers, and Summer Tanagers. There were the southern forms of the Downy and Hairy Woodpeckers, and Parula Warbler, as well as Vol. XLVII 1930

the Texas variety of the Nighthawk, Bewick's Wren, (called Texas Wren), Bobwhite, Meadowlark, and the Texas Woodpecker (*Dryobates scalaris bairdi*), also the Rio Grande Redwing, Mourning Dove, and Mockingbird. The last-named, together with the Cardinal and Crested Flycatcher, are most characteristic and nearly ubiquitous species. On wires along the roads could always be seen the Kingbird and the Meadowlark. In the bottomland timber the Yellow-billed Cuckoo, Crested Flycatcher, Blue Jay, Summer Tanager, and Red-bellied Woodpecker were extremely numerous. One of the last was seen with a luna moth in its bill. There had been a great emergence of these apparitions from fairyland the night before in this wood.

A species new to me was found in nearly every bottom-land woods, the Small White-eyed Vireo (Vireo griseus micrus). This is a clear extension of range eastward to that given in the checklist, where its range is given as Rio Grande valley to Tamaulipas etc., Mexico. It is a small edition of the northern White-eyed Vireo, and its song here seems to vary from place to place, and almost from individual to individual. One would sing whee dee diddle dee, another, wheata wheata réary, still others had the more characteristic form ti ti ti tee teédio. The last was the most musical form of their songs. A troupe of rollicking Chickadees proved to be the Plumbeous one. Cowbirds were present but Bluebirds were rare.

One day we drove twenty miles west, where there are even more extensive prairies, given over to grazing on a large scale. We walked over this prairie for hours, searching for Attwater's Prairie Chicken. Birds of this species had been seen daily by the owner of the ranch, but we saw none. Just as we were getting into our "flivver" to depart, we heard several cackle nearby but another intensive search failed to reveal them. From its ability to keep out of sight the future of this bird ought to be secure for years to come in these endless prairies, although foxes, coyotes, and wolves, which are common here, must be a heavy handicap to their existence. Every pool here harbored young and old King Rails, Bitterns, Redwings, Grackles, and Dickcissels.

Among the unforgettable experiences I had was a trip to Sand Point and Velasco, southwest of Houston. We drove to Sand Point in a sizzling hot sun, but these discomforts were, momentarily at least, forgotten when one would see a snow-white Egret standing in every wayside pool. At Sand Point is a pond set in a frame of large live-oaks from which hang festoons of Spanish moss. In the center of the pond are many large bushes. These were covered with Little Blue Herons, the majority in the white plumage, Egrets and Snowy Egrets, Louisiana and Little Green Herons, while several Anhingas were preening their feathers. Altogether it was a scene of tropical or subtropical loveliness. Following up a loud call, it was found to proceed from a Pileated Woodpecker, this, of course being the southern form *P. pileatus pileatus*.

From Sand Point we went to Velasco, a matter of about fifty miles farther. It is famous in Texas history by reason of the treaty of that name between Mexicans and Texans. Along the way Black Vultures were common. Arriving on the shore of the Gulf. we drove several miles over the smooth, hard sand of the beach. It was now toward evening. Never have I seen a locality where Prairie Horned Larks and Nighthawks are as abundant as here, the Nighthawks were flying everywhere, around and darting toward one. Their eggs and young were easy to find. The Larks were equally abundant but not quite so conspicuous, and one could distinguish them at once as different from the Horned Lark in the North; there is more yellow on the throat and the plumage is browner. We camped on the beach, a few yards from the gently lapping waters of the Gulf, with the starry heavens as our canopy. Venus shone above with unusual brightness, drawing a wide golden band over the glittering waters. Toward morning it became uncomfortably cool. Upon getting up early, we found that we had been in the company of innumerable sand and fiddler crabs, with a rattlesnake or two in the driftwood nearby. And then things began to happen. Companies of Wilson's Plover, Willets, Laughing Gulls, Caspian Terns, and Black Skimmers passed by as if in review. While kneeling down to place a crustacean in a jar, I could distinctly see how one of the Skimmers skimmed along with the lower mandible in the water. I have seen this repeatedly; there is no doubt in my mind that they do this habitually and for the purpose of procuring food.

In a tidal pool, back of our primitive camp, could be seen a company of about 100 to 150 Wood Ibises, interspersed with about ten Vol. XLVII 1930

White-faced Glossy Ibises, Egrets, Mexican Cormorants, and Ward's Herons while several Mottled Ducks (*Anas fulvigula maculosa*) were flying about. Overhead the shrill cries of the Black-necked Stilt were heard whenever we came near a grassy area fringing the pools. Their young could be seen skulking in the grass. Even here a Mockingbird sang from a pile of driftwood.

One day was spent along the densely wooded San Jacinto River, on which, a little further downstream, Sam Houston defeated Santa Anna, and thus clinched the independence of Texas. This forest cover is wild and extensive enough to harbor deer, wolves, and an odd panther and bear. The Parula Warbler and the Small White-eyed Vireo were easily the outstanding species here and their songs could be heard all the time.

Another memorable experience, still in the Houston region, was a visit to a colony of Yellow-crowned Night Herons. The heronry was located in one of the loblolly pine belts, five or six miles out from the city, with swamps near by. This species evidently nests inland only, as we never encountered it in any of the coastal marshes. This one numbered about twenty-five nests. At this time, June 13, most of the young had left the nest, but I counted about twenty still in the nests or on the ground below them. They are much like those of the Black-crowned Night Heron. The nests were built twenty-five to forty feet up in the pines, most of them in the long, dense bundles of leaves or needles at the end of the branches. There was no sound heard from the Herons, young and old were silent.

From Houston I transferred my activities to Bishop, near Kingsville. The farm or ranch where I made my headquarters adjoins the famous and enormous King's ranch, said to comprise a million acres. Here is where I received my greatest surprise. Near my quarters is a piece of original prairie, dotted with copses of mesquite, huisache, retama, and similar trees and bushes of the legume family. The trees are mostly eight to twelve feet high. When I was here the previous year this place had been absolutely dry, as it had not rained for months. There were then only a few pairs of Mourning Doves, Scissor-tailed Flycatchers, and Western Lark Sparrows here. The cow-paths between the trees were dusty, and the sparse grass none too green. When I approached the same place this year, I heard from afar a bedlam of bird voices. Coming closer, I saw water standing as far as the eye The water proved to be about three feet deep. Floatcould see. ing on it were thousands of beautiful blue, white, and yellow water lilies. Over all was a wealth of bird life, absolutely bewildering in its abundance. A flock of about 25 White-faced Glossy Ibises circled low over the trees, some carrying sticks. Many more of them were seen on nests in bushes and trees in the water. About 75 Mexican Cormorants were there, one of the few birds having green irises. Pied-billed and Mexican Grebes, 200 to 300 Coots, a number of Florida and Purple Gallinules made the surface of the water a very animated scene. Several dozen pairs of Little Blue, Little Green, Louisiana, and Black-crowned Night Herons were dotted over the trees and bushes, some on the nests, some close by them. Then there were about a thousand Great-tailed Grackles, with eggs and young in various stages of development. and, as elsewhere they were the noisiest birds present. There was a flock of ten Laughing Gulls flying overhead, evidently looking for a chance to purloin an egg or two. Later this flock was augmented to about 100. On one or two of my visits to this lovely place, flocks of some twenty Wood Ibises, as many Anhingas, and several Roseate Spoonbills were also soaring high above. Although these birds appear more or less clumsy when on the ground or perched in trees, they are grace personified when in the air. It is a thrilling sight to see these great birds draw majestic circles on immovable wing, ascending higher and higher, just as gracefully and impressively as any Hawk or Eagle. The rosy tints of the Spoonbills, gleaming in the sun, make them appear as though they could not belong on earth at all, but into some super-mundane fairy realm. The Anhingas make a somewhat ludicrous impression, owing to the way they hold their long tail feathers immovably rigid during flight. The pair or two of Scissortails were clearly "out of luck." Instead of being able to quarrel with all their neighbors as is their wont, they had long ago been forced to give that up and were standing near their nest as though thoroughly disgusted, and only feebly pecked at any bird coming near them.

On a sheet of open water adjoining the wooded tract, a flock of

Vol. XLVII 1930

about thirty Ruddy Ducks was disporting itself. It was strictly a stag party, I could not detect a female among them. The females were probably attending to their young in a swamp nearby. It comes almost in the nature of a shock to a northern ornithologist when he notices waterfowl that he associates with our northern states and Canada, such as the Ruddy Duck, Coot and Grebe, and shore birds, such as Avocet, Long-billed Curlew, Godwit, etc., on the Gulf Coast at breeding time. But such is the case, and even a few of the White Pelicans in some years remain on the coast all summer. This, however, does not mean that such groups necessarily breed here, though seemingly the Coot and Pied-billed Grebe do so regularly.

What an ogre that overgrown tropical Blackbird, the Greattailed Grackle must be to other birds, was made plain to me when, standing beside one of the largest bushes in the watery copse, I noticed one of these birds fiercely pecking at a young, but nearly fully grown Black-crowned Night Heron, not desisting till it had pushed it off into the water. This did not disturb the Heron as it swam and waded back to the bush and scrambled back into its lowest branches.

While the most interesting birds to me, as a northerner, were the Wood Ibis, the Spoonbill, the White-faced Glossy Ibis, and perhaps the Anhinga, the bird with the most outstanding personality was the Purple Gallinule. It was easily the wariest of the nesting species-the Wood Ibis and the Spoonbill were not nesting in this particular spot. While wading through the shallow water, I soon came across several of the beautiful nests of this species. One was a small well-built platform, fashioned in the middle of a small retama bush, a foot above the water, and containing four eggs. The nest was gracefully arched over with the young sprouts and twigs of the plant, making a lovely little bower, six to eight inches across, quite different from the nests of the Florida Gallinule close by. The eggs are also ornamental, being of a warm cream color, spotted and speckled with pinkish brown. Later more and larger clutches were found. The birds themselves could never be seen on the nest. Neither would they splash away noisily, as the Coot and the Pied-billed Grebe but would noiselessly sail away from the nest before one was in sight of it. They would quickly put some bushes or trees between you and them, and alight in the leafiest part of a tree, where they would remain motionless.

The tiny Mexican Grebes had their young all out of the nests but were carrying them right along with them. There were two youngsters on the back or underneath the wings of nearly every adult. On the edge of the watery area were numerous Blacknecked Stilts, flying ten to fifteen feet above one, and keeping up their highly monotonous, grating protest, *tick*, *tick*, *tick*, *krrr*, *krrr*. Just once a Lesser Cliff Swallow (*Petrochelidon lunifrons tachina*) lit on a lone wire, the only indication of a fence in the place. All our walking, wading and driving in this region was done at a temperature of between 95 and 100° F.

One day we drove for forty miles across Los Laureles Ranch, a part of the great King's Ranch. This ranch, comprises nearly all of Kleberg County, and large portions of two or three adjoining counties. On Petronilla Creek, whose banks were of a dazzling whiteness from the alkali, we saw three Avocets and a Godwit. another jolt from preconceived notions. In the endless prairie on either side we from time to time saw an Audubon's Caracara. also several Sennett's White-tailed Hawks, Dickcissels, Painted Buntings, and bands of Redwings, Grackles, and White-necked Ravens, always where a windmill was pumping water for the herds of cattle and horses, the raising of which is the sole purpose of this ranch. The Ravens show no white on the outside, but are so called because the base of the feathers on the neck is pure white. Laughing Gulls were everywhere over the prairie. They were slowly flying over at a low elevation, intently peering down toward the ground, evidently looking for grasshoppers. From what one saw here, it could be pronounced a prairie bird. We passed several ponds, in which were flocks of Wood Ibises and Roseate At Flowing Well, our goal, on Laguna Larga, were Spoonbills. again seen numerous Willets, Wilson's Plovers, Caspian Terns, Least Terns (with nests), Black Terns, old and young, Black Skimmers, a band of eight Long-billed Curlews, Rio Grande Meadowlarks, Texas Horned Larks, Nighthawks, and Bobwhites. A Road-runner could be seen now and then, darting away with incredible speed. Another bird paradise, in spite of the heat and the glaring sun.

But even better things were to come. From Bishop we drove to Brownsville, and thence to Point Isabel. Many Sparrows were seen in the prairie and salt meadows between the two places, no doubt some of them Cassin's Sparrow and perhaps Botteri's Sparrow, because just here it was first seen and described, and here it has since been rediscovered. At Point Isabel I boarded a small sailing boat, of extremely shallow draught, to get to an island forty miles north in the Laguna Madre, an island famous for its bird population. From what I saw, I suspect that the Laguna could be waded through from one end to the other. It seems to be from one to three feet deep everywhere. After a sail of seven hours we reached our goal. The island in question is covered with a dense cover of cactus and other thorny plants, one more spiny than the other. It would be impassable in the middle, had not the late R. D. Camp, the warden, hacked paths through the thorny tangle. The height of the plants is not great, from a few inches to about ten feet. Wherever one looked on this sea of thorns were to be seen nests, nests large and small, but all of the one type, the little platform of sticks characteristic of the Heron family. This evidently is a Heron metropolis. Everywhere heads and necks of Herons were sticking out from or above the prickly foliage. The most abundant species is the Reddish Egret. the most gentle and least suspicious of these Herons. A few of the white phase were seen. The next most numerous species was the Louisiana Heron, evidently the daintiest and most graceful among them. Ward's Heron was represented by numerous bulky nests, which invariably were in the highest trees, if that term can be applied to the little mesquites growing there. These were the largest and wariest members of this Heron community, and had the most raucous voice. Then there were several hundred Snowy Egrets, the showiest, as well as the most pugnacious denizens of these cactus thickets. Whenever a bird of any kind. their own or another, would as much as make a move in their direction, up would go their beautiful plumes as if getting ready for a fight. Also several hundred of the more demure American Egrets were there. Stately dignity would be the epithet to apply to them. Finally, there were many Black-crowned Night Herons present, which seemed to be the plebeians, in this aristocratic

I asked Andrews. Camp's man on the island, how assemblage. many of each kind he judged were present on the island. These were his figures: 8000 Reddish Egrets, 3000 Louisiana Herons. 1000 Ward's Herons, 800 Snowy Egrets, 400 Egrets, and 800 Night Herons. When I told Camp about these figures, he said Andrews was crazy. But even if we cut the figures in half, the total is still enormous for an island which I judge is about ten to twelve acres in extent. Over the island could constantly be seen flying Turkey Vultures, Frigate Birds, Gull-billed Terns, Least Terns, and Black Skimmers. Noticeable was the absence of the Little Blue Heron. Of passerine and other smaller species nesting on the island I noted four to five pairs of the Golden-fronted Woodpecker (Centurus aurifrons), about so many Gray-tailed Cardinals, and several pairs of Curve-billed Thrashers, which sang beautifully. Altogether this enchanted isle is a bird paradise. such as rarely falls to one's lot to see. It is hard not to dwell at greater length upon it. There is a fine description of it by Cahn in Bent's excellent 'Life Histories of North American Marsh Birds.' p. 160.

Returning to Brownsville, Captain Camp piloted me to one of his favorite spots, a "pig ranch," on the banks of the Rio Grande. This was another bird habitat with an almost unbelievable abundance of breeding species. The day was July 1. Only on some of the preferred bird lakes in the Dakotas and the Canadian Northwest could such an abundance and variety of bird life be possible. Flycatchers, Pigeons, and Thrashers predominate here, and the following could be seen or heard almost simultaneously: Derby, Ash-throated, and Mexican Crested Flycatchers, Couch's Kingbird, Red-billed and White-winged Pigeons, Western Mourning Dove, and Mexican Ground Dove, Sennett's Curve-billed Thrasher, Sennett's Oriole, Green Jay, Great-tailed Grackle, and Redwing, (either A. p. neutralis or A. p. richmondi), the Red-eyed Cowbird, Mockingbird, Gray-tailed Cardinal, Yellow-breasted Chat, Blackcrested Titmouse, Plumbeous Gnatcatcher, Texas Sparrow, Texas Wren, Texas Nighthawk, Lomita Wren, Nonpareil, Golden-fronted Woodpecker, Black-crowned Night Heron, Louisiana Heron, Cabot's Tern, Merrill's Parauque, and English Sparrows,-even here in this bird paradise. Camp, who had not left the automobile

on account of rheumatism, had seen a Black-throated Sparrow, in addition to the others. I took also a female Summer Tanager, which is not supposed to occur here at all, and saw the male at the same time. The only species found in the north seen here was the Yellow-billed Cuckoo. We missed seeing the Vermillion Flycatcher, which occurs rather commonly here, and the Chachalaca, but we heard it later. All this within about the space of an hour!

Returning to Bishop, I found nesting activities still going on strongly. Three Purple Gallinule nests were found, with five, eight, and nine eggs respectively, one of the Florida Gallinule with eleven eggs. Just why nesting in the South should go on so much longer than in the North, seems difficult to understand, unless it be that many previous sets of eggs are broken by the Great-tailed Grackles and Gulls, or that the abundance of insect food induces the birds to have more clutches than farther north, or perhaps the nearly continuous warm weather has some physiological effect on the birds.

To cap the climax, we made a trip to Bird Island, near Corpus Christi. This is a low, flat, sandy island with an area of about fifteen to twenty acres. There is a sparse vegetation of low plants, from six to twelve inches high, including some prickly pear cactus. It seems incredible what a congestion of bird life is found on this island, dwarfing even the numbers on the island near Point Isabel. One asks himself, why are these few islands picked out by the birds for such inordinate crowding? The first reason should be, the great abundance of food for old and young in the surrounding water. But that holds good for the islands nearby, which are not, or at least not extensively, used by birds. Another reason suggesting itself is the safety from marauding coyotes, common on the mainland, foxes, skunks, wolves, armadillos, etc., or should it be a desire for exaggerated sociability? There were present on and over the island at least 5000 to 10,000 Laughing Gulls, 5000 Caspian Terns, 5000 Royal Terns, 3000 Brown Pelicans, 200 Cabot's Terns, 200 Black Skimmers, 3000 Louisiana Herons, 100 Reddish Egrets, and 100 Ward's Herons. The last-named, shy as they are, here had to make their nests on cactus a foot or two high, for the simple reason that there was nothing higher on the island. About 5000 of the young of the Gulls and Terns were

crowded together in one place. They could not fly, and we were able to herd them about at will for the purpose of taking pictures of them. Overhead there was a steady stream of the adults coming in from all directions, each carrying one or several minnows in the bill. It seemed impossible that each bird should be able to find its own young in that mob. The young Pelicans were huddled together in small groups. When one came close to them they would invariably eject small fish from their bills. The nest of a Reddish Egret I photographed contained two brown young and a white one. No white adult was seen. There can be no doubt that the white form of this species is only a color phase. The trip to this island, and the walking around on it in the intensely hot, glaring sunlight, is a real hardship. But we felt happy for having been privileged to visit this wonderful island. A few days later I again made my way northward, where the birds in the woods in July were few indeed in contrast.

River Forest, Illinois.

· · .

[Auk [Oct.