

TEXAN BIRD HABITATS.

BY C. W. G. EIFRIG.

FOR many years the writer had an ardent desire to visit the faunal and floral wonderland of Texas, but this desire was not gratified until the summers of 1925 and 1926. The following is a brief summary of some of the interesting observations that I made, several of them novel even to the Texas ornithologist, and there are many surprises and unlooked-for conditions awaiting the visitor from the North, in Texas, even though he has, as the writer, read everything that has appeared in print on the ornithology of the state in the last twenty-five years.

The itinerary of the 1925 trip, the shorter one of the two, was as follows. Waco was my first base of operations, from here trips were made by auto to Cameron, 60 miles southeast, and to Clifton, 38 miles west. Next I went to Bishop, Nueces County, near Kingsville, 20 miles west of Corpus Christi, thence by auto to Brownsville and to Mercedes, in the famous "valley of Texas," as the loyal Texans in all parts of the big state call the part adjoining the Rio Grande. Then back to Bishop, to San Antonio, Austin and Thorndale, where several days were spent, with the thermometer soaring, reaching the 106° mark when I came to Waco again to pack up my specimens and depart for home.

The year 1925 was a most unusual one for Texas, as one after another of the proverbial oldest inhabitants assured me. All agreed that it was the driest year in fifty years or more. At Waco it had not rained since May of the preceding year, not counting several little sprinkles not sufficient to lay the dust. As a consequence of this we noted that the cotton plants, at Waco and along the Gulf, were only from six inches to a foot high, and in that condition flowering and opening their bolls. On the other hand, a northerner had to marvel that the trees and shrubs were uniformly green. That plainly tells their story—they are mainly desert plants which have long ago gotten used to drought conditions. No wonder the mesquite (*Prosopis glandulosa*), which begins at Waco, has extremely large, long and thick roots, in fact has more wood below than above ground, trying to get to ground

water and to store up some, not for a rainy day, but for a rainless year.

Going from the home of my host, an old college-mate, to a nearby little grove or natural park, I encountered another result of the drought. A small creek was supposed to be meandering through the grove, but its bed was dry and only a pool of stagnant, green water was noted in one place. That was true in nearly all parts of the state, and was not without its effect on bird-life. Indeed bird-life was concentrated at these pools and all one had to do to see what birds were in the neighborhood was to sit down at one of these pools and watch the pageant pass in review before him. This is what I did, and I counted about a hundred Western Mockingbirds, ten Nonpareils (the first of this striking species that I had seen), a Summer Tanager, a Texas Sparrow, twenty-three Turkey Vultures, many Western Mourning Doves (*Z. m. marginella*), several Western Lark Sparrows (*C. g. strigatus*), and then such northern acquaintances as Purple Martins, Red-headed Woodpeckers, Tufted Titmice, Orchard Orioles, a Yellow Warbler, a Yellow-throat, two Yellow-billed Cuckoos, five Bronzed Grackles, and some 200 English Sparrows. But even well known northern birds must not be dismissed here without close scrutiny and a consultation of books. Thus according to the Check-list and other authorities there should be no Yellow Warbler here in summer; it is a clear extension of its known range. What about the Yellow-throat? Simmons gives no Yellow-throat breeding for the Austin region, 100 miles southwest of Waco, and gives the Western Yellow-throat (*G. t. occidentalis*) as a migrant there. Yet I found the same form as the one here in Houston and at Brownsville, and the specimen I took does not tally with skins of *occidentalis* in the Field Museum. Any well-known northern bird is apt to turn out here to be of a different subspecies. Not so, however, the Redhead and the Cuckoo; the former goes south as far as Houston, and the latter is found commonly all over Texas, as far as Brownsville. The Nonpareil, that tropical little paint-pot of red, blue, and green, is likely to make a northerner's eyes bulge out when seen for the first time. Its song seemed at this first meeting to be a cross between that of the Goldfinch and Indigobird, as one would expect from the relationship; later

I heard different songs. That is another surprise for one from the North, the birds here sing no matter how warm or hot it is. The thermometer stood at about 95°, it was extremely warm in this little gully, yet all the birds sang lustily. The Texas Sparrow was a new acquaintance and I wished to become better acquainted with it, but it allowed no familiarity whatever; it is very wary, and the only thing one would usually see of it was the large, dark-olive tail disappearing in some bush. It is a bird of the underbrush, if there ever was one. Horned Lizards were very numerous here, more so than I found them in all the other places I visited.

The boundary-line of two great physiographical divisions of Texas runs north and south just west of Waco. To the east is the humid blackland prairie region, to the west the arid limestone hill area, the easternmost outpost of the Rockies. In the latter are seen banks, hills, and cliffs of chalk and limestone of dazzling whiteness, partly covered with juniper, scrub-oak and the like. The roads are covered with crushed stone from the nearby ledges, making them almost painfully white to the eye. The Waco people call this region, right at their back-door, West Texas. Here I saw my first Scissor-tailed Flycatcher, a Kingbird, an Arkansas Kingbird, a young Horned Lark of some kind, and a Killdeer. Of these *Tyrannus verticalis* should not have been there; Simmons gives it as a rare migrant for Austin, it clearly is an eastward extension of its known range. The same holds good for the Lark. I did not take it, but had I known at the time what I later found out from the books, I would have taken it. For according to all authorities there should be no Horned Lark of any kind here. Simmons gives as the only one for Austin *pratricula*, and that as a rare winter visitant. So what was it? *leucolaema*, *occidentalis*, or *giraudi*? In any case an extension of the known breeding range, because it was a young one in the mottled plumage. The Killdeer looked much out of place in this heat, glare and white dust.

Speaking of young birds, there is another surprise awaiting the northern ornithologist in Texas. One is likely to think that because birds in the North are in the main through with nesting when the greatest heat of summer comes along, that the southern birds ought to nest somewhat earlier than the northern ones,

since it gets warm so much earlier there. But this Lark was almost the only young bird I saw during my whole stay in 1925. I examined all small groups of birds critically, took several specimens to make sure, but there were no young ones. I found numerous nests, but even the Doves seemed to be at their first setting. They were evidently nesting later than the birds in the North. This was, however, somewhat exceptional even for Texas. Mr. R. D. Camp advanced the theory that owing to the extreme drought there was a dearth of insects, and on that account the birds postponed their nesting as much as three or four weeks. But even without a drought it seems that the birds of the South do as a rule not nest earlier than the birds of the North.

On the road to Cameron, I saw, besides old northern friends such as the Cliff Swallow, the Kingfisher, the ever-present Turkey Vulture and some more Texas Sparrows, certain new ones such as the Texas Bob-white and the Roadrunner. The former is smaller than our northern race, but has the same call. It is supposed to be paler, but those I saw had the dark bars above and below wider and of a deeper black than the northern ones. The Roadrunner is that odd, even grotesque Cuckoo, that is almost completely terrestrial, and can run with incredible speed. When they run they hold up their tail as well as the forward part of the body almost vertically, cutting a peculiar figure. Along the Bosque River at Cameron were numerous Gray-tailed Cardinals (*C. c. canicauda*), a Dwarf Cowbird, a Wood Pewee, and a lone Chimney Swift. The 'Check-list' gives the last as breeding to the Gulf coast, but during two visits, each of several weeks' duration, I saw two or three specimens only; Simmons in his 'Birds of the Austin Region' gives it only as an uncommon, irregular migrant. The Gray-tailed Cardinal, which does not show any gray in the tail, is smaller than the northeastern one, but even more brilliantly red. In some places it is the commonest bird, the Western Mockingbird is generally the most abundant, even in towns and villages, there in many instances outnumbering the English Sparrow, with the Mourning Dove a close third.

On June 15 we drove to Clifton, in the limestone hill area. Despite the drought the roadside was a veritable flower garden with patches of verbena, ruellia or petunia, gaillardia, coreopsis,

and many others, while at Clifton, in the dry lime and chalk earth and rock were found the gorgeous standing cypress (*Gilia rubra*), and the mountain pink or centaury (*Erythraea beyrichii*), the former resembling a red-hot bottle-brush, and each plant of the latter being a bouquet in itself, so numerous are the pretty pink flowers. In my quarters, an up-to-date, modern ranch house, I was awakened in the morning by a chorus of birds: Orchard Oriole, Summer Tanager, Scissor-tailed Flycatcher, Lark Sparrow, Cardinal, Nonpareil, and Mourning Dove. The nests of all of these were in the brilliantly flowering shrubs and trees immediately adjoining the house. The Scissor-tail always betrays his presence even from a distance by his harsh, rasping notes, as though he were quarreling, as he usually is. The song of the Western Lark Sparrow I consider one of the finest of all our bird songs. It begins with three clear alto notes, *hoit hoit hoit*, as though exhaled, then two more *hoit hoit* as though inhaled, and then a fine Goldfinch-like warble. The Bluebird, beloved in the North, was also a resident on this ranch.

The Nonpareil or Painted Bunting merits a passing note. I noticed bright green birds, of the size of the Indigo Bunting, singing lustily the same song as the Nonpareil. I thought here is a case of the female singing as well as the male. But these supposed singing females turned out to be males, breeding in this plumage, as the large testicles proved. Looking up my books when I got home, I found no mention anywhere of this condition, not even in Ridgway. Only when I received Simmons' 'Birds of the Austin Region' did I find it stated that the male requires three years to attain the full adult plumage. I think it should be noted in the several hand-books.

A never-to-be-forgotten treat awaited us when we drove to Neill's Creek, winding in and out among the hills near Clifton. As everywhere else the creek was dry, with here and there a water-hole. At one of them we took up our stand, to await developments; nor did we have long to wait. A wonderful pageant of the birds of the neighborhood passed before our eyes in the next half hour. Scores of Cardinals, Mockingbirds, Nonpareils, an Indigobird, a Field Sparrow, and a Junco. I did not believe my eyes when I saw the last named. But it was there, and turned

out to be *Junco oreganus montanus*, which Simmons calls a very rare winter resident. And here it was in summer, in a stifling heat of from 95 to 100°. It was a non-breeding female. That is another surprise for the northern ornithologist in Texas, namely the number of northern birds that have their breeding range not anywhere near Texas, lingering on here throughout the summer. This is especially true of the water-birds along the Gulf.

June 20 found me at Bishop, near Corpus Christi. This is a great cotton-growing region in the coastal plain. The agricultural soil is many feet thick, being alluvial. They have taken ten to twelve crops of cotton off this soil, without using fertilizer, and it shows no sign of becoming impoverished. A creek would soon wear a deep ravine into this soft material, and such a one is Petronilla Creek, to which we went. Here I saw my first Anhinga, which can be told at once by its thin neck and stiffly spreading remiges, when flying, and the first Small White-eyed Vireo. This seems to be the only Vireo over a large part of Texas. Here at last was some flowing water, lots of it, and here, in the verdure lining the water-course were Cardinals in such numbers as I have never seen before or since. Farther down, the ravine becomes flattened out, trees and shrubs disappear, the flat, low banks become dazzling from alkali, or perhaps from a chalky kind of soil. Here Gulls and Terns from the Laguna Madre, and all the various Herons and Egrets, from nearby breeding islands could be seen in turn. In 1926 I saw three Avocets here and a Godwit, probably the Marbled.

My host was a cotton planter, one of the kindest, most genial and helpful of men, always anxious to have me see things. So he arranged a trip over a part of the famous King's Ranch, to Riviera Beach, where the present owner of the ranch has a club house, which he kindly allowed us to use. Driving forty miles over hardly discernible trails we saw many Laughing Gulls which were flying slowly over the tussocks of grass, peering down, evidently looking for grasshoppers. They did not seem at all like birds of the sea. Here and there an Audubon's Caracara was sitting or rather standing stiffly erect on a post or tree, or a Harris' Hawk—both carrion feeders. Finally reaching the clubhouse, one could see a steady stream of Laughing Gulls, Caspian, Forster's

and Least Terns, Long-billed Curlews and Western Willets pass before him. Also a Pectoral Sandpiper, a Killdeer and a Louisiana Heron were there. In the weedy, sandy flat just back of the beach Cassin's Sparrow was singing industriously, and a fine song it is, finer than the allied Bachman's Sparrow. In many places on these coastal prairies Meadowlarks and Nighthawks are plentiful, but it is not easy to tell to which subspecies they belong. Those at Bishop are probably the Rio Grande Meadowlark (*S. m. hoopesi*), and the Texas Nighthawk (*C. acutipennis texensis*). Scattered over the huge ranch are "tanks." These are water reservoirs, the walls of which are of earth, into which water is pumped by wind mills, to be automatically let into troughs for the cattle or horses. Here there would always be an aggregation of Vera Cruz Redwings (*A. p. richmondi*), the Great-tailed Grackle, of which more later, and the White-necked Raven. The last is no larger than our Crow, neither is there any white in evidence, as only the bases of the neck feathers are white. At the ranch house I found a nest of the Western Blue Grosbeak (*G. c. lazula*). This was evidently the first nest, for there were no young ones about anywhere. Black Vultures were nearly always in sight in this section.

On June 25 we made an auto trip to Brownsville, where I looked up Mr. R. D. Camp, and took a little side trip to a palm grove, six miles southeast, supposed to be the largest grove of unplanted palms in the country. Here Sennett's Warbler (*C. pitayumi nigrilora*) was singing vociferously, as though it were not 100° in the shade. A flock of eight Wood Ibises arose from the Rio Grande, on which the old plantation containing the grove is situated.

From June 26 to July 1, I stayed at Mercedes, about thirty miles north of Brownsville, in the glorious "valley" of Texas. This has a distinctly more tropical appearance than the other places visited so far. While there are a few palms at Waco, Austin, San Antonio and Houston, here they are in much greater number, size and beauty. There is a row of stately Washingtonia palms along the main street, and a wealth of crepe myrtle, cape jasmine, camphor trees, eucalyptus, oleander, poinsettia and others surrounding the houses. Behind the houses are orchards of grape-

fruit, orange, and fig trees, also the peculiar china-berry or umbrella tree and mesquite, huisache, and "ebony" (*Pithecolobium flexicaule*). Taking a walk early in the morning, before breakfast, I heard a shrill, siren-like whistle, a long drawn-out *whuce whee*. Seeing no fire engine, whose siren might have made such a sound, I suspected that it must emanate from some bird. Finally I noticed that the sound came from a Great-tailed Grackle, perched on and partly hidden in a china-berry tree, which is almost the only tree here with a dense foliage—shaped like an umbrella or the cap of a mushroom. This was just one of the long repertoire of sounds, calls, whistles, and songs that this bird is capable of. It is a very common sight on the Gulf coast, as far east as Houston, especially in the neighborhood of water, as in the irrigated region of the "valley." It is a clown among birds with its huge tail and droll behavior, but also an ogre to smaller birds, for the same reasons that our Crows and Blackbirds are. Grapes were now ripe here, and so we were invited to a grape-eating party. Here I first met with the Golden-fronted Woodpecker in numbers. They certainly tried to compete with us in the number of grapes eaten. What I took to be young ones of the year turned out to be adult females. There were also no young of these birds to be seen. The Mexican Crested Flycatcher, Curve-billed Thrasher, and Sennett's Thrasher were very abundant here, as also the Inca Dove and Mexican Ground Dove. The calls of the last two are heard from many yards in town, as well as out in the country. The former calls out, *more dough*, or *rough stuff*, in a hoarse yet soft voice, the latter similarly, *well put*, or *go home*, the accent in both on the second syllable.

Going to a reservoir or something of the kind, of the irrigation system, I for the first time saw the dainty Black-necked Stilt in numbers. They were greatly agitated, flying over us, uttering a persistent, monotonous *tick tick tick tick krrrr*. They no doubt had their eggs nearby, on a mud-bar which we could not reach. When alighting, they have the same habit as our Bartramian Sandpiper, of holding their wings straight up before folding them. A group of Mexican Cormorants was standing near on a mud bank. A Killdeer was acting very queerly around us, and a short search revealed its nest. There were no young around, so it seems to have been its first nest for the season.

While we were watching these birds we heard in the distance a peculiar roar, as though made by a chorus of many voices. Again it reminded one of thunder still very far away. I said to my companions, "that must be a heronry." Accordingly, we went to where the sound seemed to be coming from. We traced it to a large thicket, in the Texas sense of the word, a thicket of various kinds of cactus one more spiny than the other, and other low trees and shrubs, all as thorny as they could be, and intertwined and matted together in a fashion to make ingress impossible. Here hundreds of pairs of Doves had their nests, and all were cooing and crooning away vigorously. The leading species was the White-winged Dove, but there were almost as many Western Mourning Doves, and had it been possible for us to penetrate, we perhaps would have seen the Red-billed Pigeon and the White-fronted Dove. This corner of the United States is richer in Pigeons and Doves than any other part, for besides the four species named there are the Inca and the Ground Doves, making six in all. This nesting place gave one a faint idea, I thought, of the vast nesting places of the extinct Passenger Pigeon. Returning towards evening we saw several Lesser Cliff Swallows circling overhead, and a Western Horned Owl in the hands of a man who had just shot it from a small mesquite tree, standing all by itself on a knoll. It is the form *B. v. pallescens*, no paler than ours in Illinois, but decidedly smaller.

From Mercedes I went back to Bishop, thence to San Antonio where I looked more at the Alamo and the old Spanish missions than at the birds, but noted that the Golden-fronted Woodpecker and the Inca and Ground Doves were still about. Then I went to Thorndale, where along the romantic San Gabriel River I found the usual congestion of water-hole birds, and added the Carolina Wren and the Texas Woodpecker to the list. At Walburg, I heard a Mockingbird plainly calling *poorwill poorwill*, showing that the Poorwill no doubt was in that vicinity. The extreme heat, always in the neighborhood of 100°, and the thorniness of the thickets thoroughly discouraged all searching for it.

Finally I went again to Waco, where I packed up my botanical and other specimens and departed for home.

River Forest, Illinois.