any way. Several ornithologists now well known can doubtless recall the assistance which he rendered them in the early days of their study of birds. At the meetings of the Union he made it a point to become acquainted with the younger members and many of these visiting New York were from time to time invited to his home. While rarely referring to religious matters he was in fact almost as much interested in his church work as he was in civics and for many years was a vestryman in the Episcopal Church. Quiet and unostentatious, he never missed an opportunity to extend a helping hand to any who needed it and many private deeds of charity should be placed to his credit. To one in need he spared no effort to render such assistance as he could. Wherever he went he made friends and while in his legislative work he necessarily had opponents it is doubtful if he had any actual enemies. To know William Dutcher was a privilege, to work with him was an inspiration.

1939 Biltmore St., Washington, D. C.

NOTES ON THE BIRD-LIFE OF SOUTHEASTERN TEXAS.

BY T. GILBERT PEARSON.

Plates XVI-XVII

During the spring of 1920 a field trip in the interests of the National Association of Audubon Societies took me into south-eastern North Carolina, southern Mississippi, western Louisiana, and southeastern Texas. The region covered in Texas has been so little visited by ornithologists of recent years that it is thought the following observations concerning some of the birds found in that territory may be worth recording.

Aboard the patrol-boat "Jim Duke," owned and operated by the Texas State Game, Fish and Oyster Commission, in company with William L. and Irene Finley, I cruised the various bays from Aransas Pass northward to Caranchua Bay, an offshoot of Matagorda Bay, north of Port Lavaca. By means of launches and a sailing vessel I also investigated much of the waters of Corpus Christi Bay and Laguna de la Madre, going as far south as the southern end of Padre Island. The entire distance covered was in the neighborhood of two hundred miles. Some time also was spent in field observations at various places on the mainland, especially in the neighborhood of Brownsville and the town of Aransas Pass. My Texas field work covered the period from May 20 to June 7 inclusive.

1. Larus atricilla. Laughing Gull.—This was found to be an abundant species and was breeding at various points in the First and Second Chain of Islands just south of San Antonio Bay. On May 21 perhaps 800 pairs of these Gulls were nesting on a series of islands covering a distance of a mile or more just back of Harbor Island near Aransas Pass Inlet. Eggs were numerous, but no young were seen. Many nests were still in process of construction. An enormous colony, numbering perhaps 10,000 or more, was guarding nests and eggs on Big Bird Island on Laguna de la Madre on May 23.

Every Laughing Gull nest found on the Texas coast was built on dry ground, a location quite different from that prevalent on the Atlantic coast, where south of New England, they seem to be built mainly on the salt marshes.

- 2. Sterna maxima. ROYAL TERN.—Royal Terns were seen at numerous points in all the salt-water bays and lagoons visited. More than 200 nests were found on a small island, back of Harbor Island near the inlet of Aransas Pass. One of the largest breeding colonies I have ever seen was discovered on Big Bird Island in Laguna de la Madre, May 23. The eggs had been deposited in very slight depressions on the open beach and, as a rule, were from fourteen to eighteen inches apart. The areas thus covered were extensive. One such egg-field was fifteen by 84 feet Another was eighteen feet wide and 120 feet long. Stepping off a space estimated to be ten feet square I found upon counting that the area contained sixty-two nests. By measuring the various egg-fields in a similar manner I computed the number of Royal Tern nests on Big Bird Island to be 3,456. About one nest in twenty contained two eggs, all others held but one. No young were found on any of the islands.
- 3. Sterna sandvicensis acuflavida. Cabot's Tern.—A colony of Cabot's Terns was found nesting on Big Bird Island in Laguna de la Madre on May 23. The eggs had been deposited on the bare sand in the manner employed by the Royal Terns. There was only one egg-field. This covered an area approximately 20 by 75 feet and was estimated to hold

892 nests. Only four nests contained two eggs. All others held but one. No young were found.

Many Gull-billed (Gelochelidon nilotica) and Caspian Terns (Sterna caspia) also were occupying the island. Numerous nests of both species containing eggs were examined and many young Caspians were seen.

4. Pelecanus erythrorhynchos. White Pelican.—It may not be known generally that of the numerous White Pelicans resorting to the coast of the Gulf of Mexico in winter a few remain when the great flocks move northward in spring. On June 12 and 13, 1918, I found about 70 among the Brown Pelicans at Timbalier Pass, Louisiana. So far as I am aware there has been no published record of their breeding in these southern waters. I was, therefore, greatly surprised on May 23, 1920, to discover a colony of nesting White Pelicans on Little Bird Island in Laguna de la Madre. Fifty adults were seen, eighteen young and fourteen eggs were counted. Photographs were secured of both old and young. The nests were on the ground and were composed of very small quantities of weed stalks and similar vegetation, which could readily be gathered lo-The birds were shy and the last ones left their eggs and young when we were still within 75 yards of them. They returned and passed overhead a few times, after which they settled on the water some distance away.

White Pelicans were seen at three other points on the coats: one in a colony of Brown Pelicans on Dunham Island, Aransas Bay, May 26; two near Point Isabel, June 2; and about thirty near Green Island, Laguna de la Madre, June 3.

5. Pelecanus occidentalis. Brown Pelican.—When in 1918 I cruised the Gulf coast of the United States at the request of the Federal Food Administration to make a census of the Brown Pelican population and secure data on its feeding habits, I estimated the Brown Pelicans on the Texas coast not to exceed 5000. Owing to misinformation I did not at that time succeed in visiting all their breeding places. This survey I believe I have completed during the present season and I am of the opinion that my former estimate of their numbers was a liberal one.

On a small shell lump near Dunham Island, at the northern extremity of Aransas Bay, we found on May 26, a breeding colony of these birds. This little isle varied from fifteen to twenty-five feet in width and was about 150 feet in length. Young pelicans to the number of 304 were found and with the exception of about a half dozen all were large enough to leave the island and swim away upon our approach. As the young waddled over the shells twenty of them disgorged varying quantities of the fish they had lately consumed. An examination showed that with the exception of three mullet all were Gulf menhaden, fish never used for human consumption, but because of their oily character are undoubtedly nutritious for growing Pelicans.

Farther south, on Dead Man's Island, near Corpus Pass, a colony of

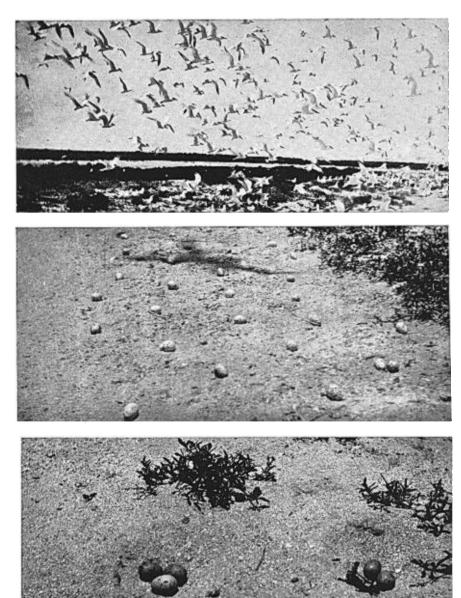
Brown Pelicans estimated at 2,000 was breeding. Here also the season for eggs had nearly passed. I have never seen any place where Pelicans were so tame as on Dead Man's Island. It was an easy task to stand in the open and repeatedly photograph the entire pelican population, the nearest birds being not more than fifteen feet distant. This visit was made on May 23.

The same day at Big Bird Island in Laguna de la Madre 48 pelicans nests were found. There were no young here. The number of eggs to the nest ranged from three to five. One nest, isolated from the others at a distance of at least 200 yards, was found to contain eighteen eggs! A pelican was sitting on them when we approached. There were no signs to indicate that eggs had been placed there by other than natural means, although it is hardly conceivable that one bird could have deposited so many.

6. Ajaia ajaja. Roseate Spoonbill.—On May 24, while driving in company with William L. and Irene Finley, at a point about five miles north of Aransas Pass, we came upon a flock of thirty-six Roseate Spoonbills. They were standing in shallow water on the leeward and sunny side of a thick tulé marsh. As they flew away we all remarked on the very dark appearance of one of the birds. A little later while we watched them feeding in a salt lagoon the dark bird was again in evidence. next day at about the same hour we again found the flock resting at the identical spot by the tulés. It numbered forty-three on this occasion. While for twenty minutes Mr. Finley made moving pictures of them at a distance of 225 feet, Mrs. Finley and I again directed our particular attention to the peculiar member of the flock. The bird stood in a strong light and with field glasses we had every opportunity to examine it at leisure. The feathers of the entire neck, breast and most of the back were glossy black. Undoubtedly it was a melanistic specimen, one of those apparently rare occurrences among birds.

Spoonbills were noted elsewhere along the Texas coast as follows: May 26, five were seen in Mesquite Bay; May 27, flocks of six and twenty-six were observed in the same general neighborhood; May 28, eighteen were found near Port O'Connor, and the same evening two were discovered in Matagorda Bay. On May 28 at the southern end of San Antonio Bay, thirty-two were seen. On June 2, spoonbills to the number of eleven arose with a great flock of Wood Ibises from a lagoon between Brownsville and Point Isabel.

None were found breeding on the Texas coast. There is a widespread impression in this region that these so-called "flamingoes' breed early in Mexico and later migrate to Texas. This may be true of many but others probably breed in Texas as on May 18, 1920, I visited a colony of breeding spoonbills on Cameron Farm in Cameron Parish, Louisiana, at which date no young were seen. Five nests were examined and all



1. A CABOT'S TERN COLONY.

- 2. Eggs of the Cabot's Tern.
- 3. NEST OF THE CASPIN TERN. ALL ON BIG BIRD ISLAND, TEXAS. FROM 'BIRD-LORE.'

contained eggs. Eighty-seven spoonbills were here observed in the air at one time, and seventeen others were frightened from their nests immediately after this count was made.

- 7. Casmerodius egretta. Egret.—This appears to be a rare species today along the lower Texas coast. Five individuals were seen during my trip to these waters in June, 1918. This year only two were identified with the exception of those found breeding on May 29 in a heron colony on Wolf Point Ranch, Caranchua Bay, in Calhoun County. Possibly fifty pairs were nesting here. Many young were out of the nests and climbing about over the bushes.
- 8. Egretta candidissima candidissima. Snowy Egrets to the number of possibly 75 pairs were found breeding in the Wolf Point Ranch rookery on May 29. Young in various stages of growth were seen and a few nests held eggs. At least two pairs were breeding in the Green Island rookery, Laguna de la Madre, June 3. On May 28, five birds were seen on a sand point in Matagorda Bay and one was identified near Point Isabel on June 2.
- 9. Dichromanassa rufescens. Reddish Egret.—In 'Bird-Lore,' Vol. XX, page 384, I reported having found a breeding colony of these egrets on the Second Chain of Islands, north of Mesquite Bay, Texas, on June 20, 1918. A point of interest attaching to this discovery is that there appears to have been few, if any, records of this species breeding in the United States of recent years.

On May 21, 1920, I again visited this group of islands in company with Mr. and Mrs. Finley. The heavy growth of Spanish bayonet plants, mesquite and other bushes that covered the islands at the time of the former visit had largely disappeared and only a few dead mesquites were left. Furthermore the island chiefly occupied by the birds had been greatly reduced in size as a result of high storm tides. Six small islands of the group were this year found serving as nesting places for various herons. I estimated that about 500 pairs of Reddish Egrets were present. Perhaps the total population of Ward's Herons, Black-crowned Night Herons and Louisiana Herons numbered about the same. One young Reddish Egret in the white phase of plumage was found among the hundreds of young birds that were running about in the weeds under foot. One adult white bird was found dead beside its nest. These were the only white specimens seen.

Young in all stages were found and some nests contained eggs. The nests were in bushes, on drift, and on the ground. On one island, many-had been built in wild sunflower plants at distances varying from one foots to three feet from the ground.

On Big Bird Island south of Corpus Christi, six Reddish Egrets were seen and two nests, one with eggs and one with young, were observed. These nests were on the ground.

On June 3, 1920, in company with R. D. Camp of Brownsville and George C. Shupee of San Antonio, a visit was made to Green Island lying in Laguna de la Madre 32 miles north of Point Isabel. So far as I am aware this island has been unknown to modern ornithologists. The greater part of its forty acres or more consists of a flat sand beach. Perhaps eight or ten acres is higher and this portion at its northern end rises to the height of fourteen feet, above the beach. The wooded area was found to be densely covered with a miscellaneous growth in which mesquite, prickly pear cactus, Spanish bayonet and maguey predominated. The whole brush-covered area was used by a breeding colony of herons that may have numbered from 5,000 to 10,000 birds.

The dominating species was the Reddish Egret. Thirteen adults in the white phase of plumage were counted. The remaining species in the colony consisted of Ward's, Louisiana and Black-crowned Night Herons in about equal numbers. A few Snowy Egrets also were present and breeding.

Reddish Egrets in small numbers were found on suitable feeding grounds at various points from Mesquite Bay southward to Brazos Pass at the south end of Padre Island.

10. Ortalis vetula mccalli. Chachalaca.—Since this bird was first discovered in the United States by Sennett nearly thirty-five years ago very little has been written about its habits and activities, although it is known to be a resident in Cameron and Hidalgo Counties, Texas.

It is a bird highly esteemed for food and is relentlessly persecuted by local gunners. This, added to the fact that it is of very local distribution and the particular regions where it is found are rapidly being cleared for agricultural purposes, points strongly to its rapid disappearance from the United States. I talked with a gunner in Brownsville who stated he had hunted in that section every season for eighteen years but had never killed a Chachalaca nor had he been able even to see one. I had the good fortune to establish pleasant relations with two men who know many of the secrets of these birds and on June 6 they took me to a thick growth of scrub timber some eight or ten miles from Brownsville and introduced me to the Chachalaca.

The first ones found were an adult with two young running on the ground beneath the trees. Although both my companions saw them they escaped my notice. Five minutes later, however, one was pointed out sitting in a tree perhaps fifteen feet from the ground and within a few minutes I was able to get a not altogether satisfactory photograph of still another standing on a bare limb. A heavy rain storm ensued. As soon as the sun came out the Chachalacas appeared in all directions, usually standing in the tree-tops in such a manner that their heads were about on a level with the topmost leaves. Here while they dried their feathers they carried on a concert that we found highly exhilarating. We must have heard fifty calling that afternoon and as far as I could distinguish in every

instance but one the birds called in pairs. In calling there would be one loud note followed by two lower, shorter notes. Almost at the instant the second short note was given the other bird, presumably the female, in a higher pitched voice would give a loud call followed by two lower, shorter notes. Then her companion would instantly respond. The calling would continue with great intensity, volume and astonishing carrying power over a period of one minute or more. Vainly I strove to make the word "chachalaca" out of their notes, yet I presume it sounded as much like that word as anything else. Local white gunners call this bird the "Chatch-a-lac"; the Mexicans call it "Shack-a-lac-a." The notes reminded me of the cackling of guineas, and also of a medley of stringed instruments with a nasal tone running through it all.

I found the birds suspicious and very quick in detecting an intruder. When alarmed they produced a low cackling note repeated with rapidity and without modulation.

Those seen on dead limbs or in the open frequently took the attitude often assumed by turkeys when alarmed on a roost, the body, neck and tail assuming a straight horizontal position. Frequently one would alight on a twig so small that it would experience difficulty in retaining its perch, but even here with its great tail spread and round wings waving in an attempt to regain its balance, it was never too much engaged to begin instantly its wild song if its companion led the way.

Bendire in 'Life Histories of North American Birds,' quotes J. A. Singley as saying in connection with the nesting of the Chachalaca on the Lower Rio Grande:

"All the nests I found were in mesquite stubs, where the limbs had been cut off to make brush fences. The limbs were never cut close to the tree, and being close together form a cavity; leaves and twigs will fall in this and accumulate, and the bird occupies it as a nesting site. I did not find a nest that I could say was built by the bird."

The one nest pointed out to me as being of this species had the general flat appearance of a dove's nest, but somewhat larger and more substantial. It was on the limb of an ebony tree about eight feet from the ground.

Chachalaca eggs are frequently hatched under hens by the Mexicans and the birds afterwards kept in captivity. In Brownsville I saw one of seven that had been raised from nine eggs taken from three nests in 1919.

11. Columba flavirostris. Red-billed Pigeon.—This species was found on June 6 when visiting the territory occupied by the two colonies of White-winged Doves mentioned elsewhere. It is a handsome bird about the size of the Domestic Pigeon and locally known as the "Blue Rock." About fifteen of the birds were observed, some of them at a distance not greater than twenty yards. One was frightened from its nest in an ebony tree about seven feet from the ground. It was, for a pigeon, a fairly substantial one made of twigs and was placed on a horizontal limb. It contained one egg.

- 12. Leptotila fulviventris brachyptera. White-fronted Dove.— The peculiar, deep-throated notes of the White-fronted Dove were heard on eight occasions during the afternoon of June 6 while in the neighborhood of the White-winged Dove communities. Only one bird was seen and no nests were found.
- 13. **Melopelia asiatica.** White-winged Dove.—These birds were found to be very common in Cameron County. In passing along the roads in the neighborhood of Brownsville, one may frequently see them sitting on way-side posts or trees, or flying overhead, much in the manner of the Mourning Dove.

I had never read or heard that these doves accumulate in numbers to breed, and it was a source of much surprise to find them actually nesting in communities. About six miles east of Brownsville there is an extensive palm grove, known as Los Palmas. Nearby is a thick growth of huisache trees covering ten acres or more. Upon approaching this dense, scrubby forest my attention was immediately attracted by the cooing of doves and upon entering its almost impenetrable interior the impression grew that the whole world, so far as one could judge by sounds, was a wild natural dove cote.

In this area many hundreds of doves must have been nesting. The nests were not placed closely together as was the habit of the Passenger Pigeon, but several were readily found. Those examined all contained eggs. Two seemed to be the universal number. This was on June 1.

On June 6 I visited two other regions where the White-winged Dove was nesting in great numbers. These were located eight or ten miles in another direction from Brownsville. The spots selected consisted of very thick growths in which mesquite, huisache and ebony were noticably abundant. Here likewise the number of doves was truly astonishing to one who had never seen representatives of this family nest, except in isolated pairs. Eggs and newly hatched young were found on this date.

The calls of the White-winged Dove can readily be distinguished from those of the other doves of the region. The most common note strongly suggests the hoot of the Great Horned Owl softened by distance. All three of these breeding places were in the immediate neighborhood of 'resacas' (ponds).

14. Coragyps urubu. Black Vulture.—So far as I was able to determine this vulture out-numbered the Turkey Vulture along the lower Texas coast by at least ten to one. They were found at all the heron and Pelican colonies, where they doubtless feed on the many young birds that always perish about a rookery. One of the Audubon Association's wardens in Florida some years ago reported having seen these birds kill and devour the young of the White Ibis and it is of course possible that they engage regularly in such practices. On four occasions I saw Black Vultures fly out from thick growths of cactus and thorn bushes in such

manner as to indicate they had been frightened from their eggs or young. In only one instance did I penetrate one of these dense, thorny thickets in quest of the nest. This was on a small island about a mile from the Dunham Island Pelican colony. Two young that reminded one of large short-tailed roosters were found. They bit viciously when taken in the hand but otherwise were very gentle and posed admirably before Mr. Finley's moving picture camera. The black wing and tail feathers were in evidence, but otherwise their bodies were covered with a down, light brown in color and therefore noticeably different from the white of the young Turkey Vulture.

15. Crotophaga sulcirostris. Groove-billed Ani.—Six of these birds we found in the scrub near Brownsville on June 6. On three occasions I listened to their somewhat harsh, oft-repeated notes. On the ground in a dense thicket I found the complete shells of two Ani eggs. Both were broken across the center and appeared to have been removed from the nest after the young had hatched. One Ani found in the immediate vicinity of the eggs was very tame and appeared reluctant to leave the neighborhood.

A short examination of the adjacent trees failed to reveal the nest and matters of a pressing nature prevented a more extended search.

- 16. Corvus brachyrhynchos brachyhynchos. Common Crow.—On Wolf Point Ranch in Caranchua Bay seven Common Crows were seen on the afternoon of May 28. Mention is made of this fact because of the rarity of the species in that part of the country. During the entire time spent in southeastern Texas these were the only crows observed, and the inhabitants of the country when asked about the bird uniformly stated that it was never seen in that region.
- 17. Megaquiscalus major macrourus. Great-tailed Grackle.—One of the most noticeable, noisy, and abundant species of birds along the lower Texas coast is the Great-tailed Grackle. It possesses an astonishing repertoire of whistles, calls, and guttural sounds and one sees or hears them everywhere. On islands surrounded by salt-water it is found and one may see it also about fresh-water ponds, or in the towns and on the high prairie or chaparral lands if water of any kind is in the vicinity.

These grackles are very active and the great, glossy, black males assume many striking attitudes. One of their favorite manoeuvers is for two to face each other, where with necks extended and with bills pointed directly upward to the extreme limit of possibility they will stand in a strained and rigid attitude for a time as if seeking to outdo each other in a contest of endurance.

On Big Bird Island in Laguna de la Madre, where there was a total absence of trees or bushes, the grackles had built their nests in weeds from one inch to a foot and a half from the ground. I found their nests

in the heart of a tule marsh near Aransas Pass and in all the heron colonies visited.

Near the main buildings on the Wolf Point Ranch in Calhoun County, the prairie is decorated by two "motts." In local usage the word "mott" means a thick growth of slender live-oak trees. The combined area of these two motts is certainly not over an acre and a half in extent, yet they held on May 29, not less than 1,000 nests of the Great-tailed Grackle. The noise produced by the birds could be heard from the deck of the yacht where we lay at anchor half a mile distant.

As mentioned above these birds were found in all the heron rookeries I visited, nor did they display any hesitancy in placing their nests in the immediate proximity of those of other species. An extreme example of this custom which also serves to illustrate how many birds may crowd their nests together when good sites are scarce, was found in one of the colonies on the Second Chain of Islands group.

A dead and uprooted mesquite bush was found, the entire top of which was covered by two Ward's Herons nests. One held five eggs and the other was the home of three large young that walked off and climbed to the ground, as we approached. These nests were only about five feet from the ground, yet beneath them and in the same bush were found the following occupied nests; three of the Louisiana Heron, two with young and one with eggs; one of the Black-crowned Night Heron with three young, and four nests of the Great-tailed Grackle all containing young. Nor was this all, for on the ground under the bush was an unoccupied nest of the Ward's Heron and a Reddish Egret nest with two eggs and the white parent lying dead beside it.

In addition to the above many other species were observed and more or less notes made of their nests, feeding habits, or distribution. Among these were the following:

Sterna antillarum. Least Tern.

Hydrochelidon nigra surinamensis. BLACK TERN.

Rynchops nigra. Black Skimmer.

Anhinga anhinga. Water Turkey.

Phalacrocorax vigua mexicanus. Mexican Cormorant.

Fregata aquila. Man-o'-war-bird.

Anas fulvigula maculosa. Mottled Duck.

Marila valisineria. Canvas-back.

Plegadis guarauna. White-faced Glossy Ibis.

Butorides virescens virescens. Green Heron.

Fulica americana. Coot.

Himantopus mexicanus. Black-necked Stilt.

Catoptrophorus semipalmatus inornatus. Western Willet.

Oxyechus vociferus. KILLDEER.

Ochthodromus wilsonius. Wilson's Plover.

Arenaria interpres morinella. Ruddy Turnstone.

Haematopus palliatus. Oyster-catcher. Colinus virginianus texanus. Texas Bor-white. Zenaidura macroura carolinensis. Mourning Dove. Chaemenelia passerina pallescens. Mexican Ground Dove. Scardafella inca. INCA DOVE. Polyborus cheriway. Audubon's Caracara. Geococcyx californianus. ROAD-RUNNER. Cervle americana septentrionalis. Texas Kingfisher. Dryobates scalaris bairdi. Texas Woodpecker. Centurus aurifrons. Golden-Fronted Woodpecker. Chordeiles acutipennis texensis. Texas Nighthawk. Muscivora forficata. Scissor-Tailed Flycatcher. Pyrocephalus rubinus mexicanus. Vermilion Flycatcher. Otocoris alpestris giraudi. Texas Horned Lark. Xanthoura luxuosa glaucescens. Green Jay. Agelaius phoeniceus richmondi. VERA CRUZ RED-WING. Sturnella magna hoopesi. Rio Grande Meadowlark. Cardinalis cardinalis canicaudus. GRAY-TAILED CARDINAL. Passerina ciris. Painted Bunting. Spiza americana. Dickcissel. Vireo belli belli. Bell's Vireo. Mimus polyglottos leucopterus. Western Mockingbird. Toxostoma longirostre sennetti. Sennett's Thrasher. Toxostoma curvirostre curvirostre. Curved-billed Thrasher. Baeolophus atricristatus atricristatus. Black Crested Tit-MOUSE.

1974 Broadway, New York.

THE LATER FLIGHTS OF THE PASSENGER PIGEON.

BY FRANK BOND.

Plate XVIII.

Between the years 1872 and 1875 or 1876, eastern Iowa, for a distance of sixty or more miles west of the Mississippi River, witnessed many intermittent flights of the fast dwindling flocks of the Passenger Pigeon. At that time I was not familiar with