

## NOTES ON THE SUMMER AVIFAUNA OF BIRD ISLAND, TEXAS, AND VICINITY

By ALVIN R. CAHN

WITH SEVEN ILLUSTRATIONS BY THE AUTHOR

SOME THIRTY miles south of Corpus Christi, Texas, and about four miles off the coast, there rise out of the Laguna de la Madre two tiny, sun-baked shell reefs, known locally as Big and Little (also South and North) Bird Islands. So small are these spots that they appear on but very few maps, and so unimportant are they that they are known only to a few well-informed ornithologists, local Mexican fishermen who raid them periodically for birds' eggs, and an occasional adventurous picnic party. Even the local game warden stationed at Corpus Christi has never visited the islands in the course of his long local service. In spite of which, the Bird Islands are today among the most interesting spots, ornithologically, in all Texas.

The Laguna Madre is a long, very narrow strip of water that is almost cut off from the Gulf of Mexico by the equally long, sandy ridge of Padre Island, which extends from opposite Corpus Christi southward, paralleling the coast, to Point Isabel near the mouth of the Rio Grande, a distance of about one hundred miles. Padre Island acts as a protective barrier to this section of the coast of Texas, receiving the brunt of the attack of the waters of the Gulf of Mexico. Yet even this protection is insufficient when the furious storms characteristic of the region sweep shoreward. At such times the waters, whipped into mountainous waves by a terrific gale, rise in their fury, completely overwhelm Padre Island, and rush madly on the coast, which then may be submerged beneath twenty or more feet of turbulent water. When this occurs (the last big storm was in September, 1919), the Bird Islands, which rise above the water a scant two or three feet at the highest point, sink completely from sight, to reappear again days after the storm is over. Such storms play havoc with the fauna of the islands, and, when they occur during the breeding period of the thousands of birds nesting upon them, a terrific loss of life results. Since the islands are so low, their shape and size are constantly changing to a greater or less extent, which accounts for the difficulty the writer had in getting any idea of the size of the islands prior to his visit.

Bird Island (in order to simplify matters we shall refer to Big Bird Island, where the writer did most of his work, simply as Bird Island) is composed mainly of crushed shells, with occasional patches of a black, mucky material, and a sprinkling of sand. The central portion is covered with a low, creeping, succulent vegetation which fairly covers the ground, but which fails to conceal even a brooding gull. A few prickly-pear cacti occur locally, and two scraggly clumps of sunflowers are the only plants that break the otherwise monotonous uniformity of the vegetation. There is no shade anywhere for anything larger than an insect, and the entire island lies gasping under a semi-tropical sun. The surrounding waters teem with fish and other aquatic life which afford an abundant food supply to the birds. As to the island, except for a few insects that are blown out from the shore, and a few crustaceans, notably the fiddler crab, which burrow into the wet beach, it is practically lifeless—except, of course, for the thousands of wheeling, screaming sea-birds that breed upon it. On this island, less than half a mile in length

and not over a hundred yards in width, so unattractive in its physical features, the writer, accompanied by Mr. W. A. Rounds and Mr. S. Welsh, spent the period between May 26 and June 2 inclusive, eight wonderful, unforgettable, sweltering days and nights, surrounded by thousands of clamoring birds, studying and photographing.

A number of papers have been published dealing with the birds of the general vicinity of Corpus Christi, and a few of these give casual mention to Bird Island. Of the older papers, those of Singley (1), Hancock (2) and Chapman (3) cover the general region, and the more recent paper of Pearson (4) lists a few of the species of birds found on the island. However, as far as the writer has been able to ascertain, nothing has been published dealing with this most interesting island as the focal point, and inasmuch as 68 species were identified on and about the island itself, it seems advisable to offer the list as it now stands. This paper is the third of a series of avifaunal studies undertaken by the writer (6 and 7), in various parts of the state of Texas.

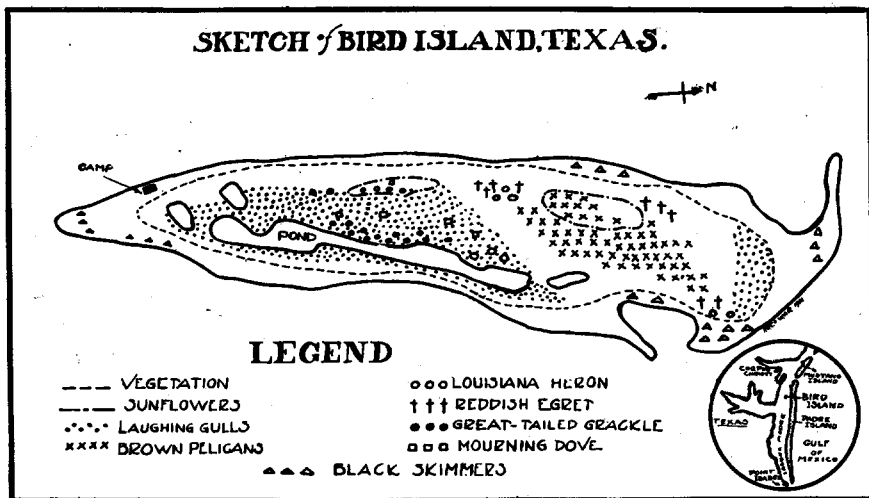


Fig. 39.

(Since this article was written, the writer has learned that the Bird Islands are among six small islands just rented by the National Audubon Society for a period of fifty years. This places the vast number of breeding birds under much needed protection. Both the Audubon Society and the state of Texas are to be congratulated on this great step in conservation.)

A list of the birds found by the writer in the vicinity of Bird Island follows.

1. *Podilymbus podiceps*. Pied-billed Grebe. Ten records are at hand, totalling sixteen individuals. Frequents the indentations of the shore-line, and nests in suitable (reedy) locations on the mainland. On May 30 one bird was found at daylight swimming about in the inland lagoon within the island.

2. *Larus delawarensis*. Ring-billed Gull. A single specimen, evidently dead for a period of weeks, was found in the heart of the pelican rookery. Undoubtedly a migrant only.

3. *Larus argentatus*. Herring Gull. Two circled over the island for nearly two hours on the morning of May 27. Their plumage was intermediate between the winter

and summer condition; the birds were either wanderers or non-breeding individuals such as are occasionally found far away from the nearest breeding ground.

4. *Larus atricilla*. Laughing Gull. An abundant breeding species. On Bird Island these gulls had but a single egg in the nest on May 26, when we arrived, and before we left practically every nest had its full complement. After the first egg has been laid, the subsequent eggs are deposited on successive days. On this island the average complement was three: out of 250 nests in which the laying was finished, 192 contained 3 eggs, 52 had 4 eggs, 5 had two, and a single nest contained but 1 egg. On Little Bird Island, nests contained the first egg on May 31. No young were hatched, and no eggs were found anywhere that were well along in incubation. My estimate showed about 2500 pairs of these birds on Bird Island, and about 600 pairs on Little Bird. The nests were invariably located among the succulent vegetation, the birds avoiding absolutely both the open beaches and the soggy edges of the inland lagoons. When we first reached the island the birds were very timid, and wheeled, screaming, over our heads, darting at us and making a great stir. This commotion spread rapidly the entire length of the island until thousands of silvery wings flashed in the sun. Soon, however, our presence was accepted, and, though our approach always sent a few into the air, the general alarm soon died, and the disturbed birds would return to their domestic duties in less than a minute. The greatest vocal activity in the colony occurred usually just at dusk and continued until well after dark. By ten o'clock at night things were fairly quiet, the "laughing" commencing again about three o'clock in the morning. Considering the early stage of incubation of the eggs, it was surprising to find the birds sitting so "close": one bird under observation was absent from her nest only eleven minutes in twenty-four hours. No amount of juggling the eggs confused the birds, which evidently return to the spot, rather than to the eggs. One bird refused to settle on her own eggs when the nest and contents were moved three feet from its original site. Replaced again later in the day, she returned to her incubation apparently quite unconcerned.

5. *Geochelidon nilotica*. Gull-billed Tern. About two hundred of these birds were seen daily on Bird Island which, in fact, they never left, though the species was not yet nesting. The birds spent most of their time on the east side of the island, circling only a short distance out over the Laguna.

6. *Sterna caspia*. Caspian Tern. Considerably more abundant, I believe, than the preceding species, but of much more restless habits. Pearson (4) reports "many young Caspians" on May 23, 1920. On June 2, 1921, it is interesting to note that the species had not even begun to nest, as no young birds, nor any old nests, were in evidence. In this connection it may be stated that the conditions on the island in 1921 differed radically from those reported by Mr. Pearson in 1920, many species being present in greatly reduced numbers (both adults and nests), and the whole breeding season apparently nearly a month later.

7. *Sterna maxima*. Royal Tern. An abundant breeding species, though not nearly as abundant as found in 1920 by Pearson. About 500 individuals frequented Bird Island, and about 200 more were found on Little Bird. The first egg laid by the species was found the morning we left the island, June 2, though the shallow depressions which were to serve as nests were in evidence two days earlier. It is evident that there were to be two nesting blocks, one in the sand and shell at the extreme south end of the island, and another just south of the bay at the northeast corner of the island. None of the nests contained lining material of any sort.

8. *Sterna sandvicensis acutiflvida*. Cabot Tern. About 400 of these terns were present on Bird Island, and less than 100 on Little Bird. The species had not yet begun to nest, though it is a common breeding species on both islands.

9. *Sterna hirundo*. Common Tern. A few Common Terns were found on Little Bird Island, and one clutch of three eggs, perfectly fresh, was taken. Not really common, but a breeding species.

10. *Sterna antillarum*. Least Tern. A breeding species on Little Bird Island, and seen only twice at Big Bird. On the former island, fourteen nests, none containing over two eggs, were found. A little colony of five nests was found on the Laguna side of Padre Island, opposite Little Bird Island. The birds were very timid, and refused to be photographed.

11. *Hydrochelidon nigra surinamensis*. Black Tern. The presence of these

birds, which ordinarily breed so much farther north, is a little surprising. Every evening while we were on the island a flock numbering about eighty individuals came to Bird Island, appearing from the north at about 7 o'clock. The birds flew over and about the island for some quarter of an hour, flying at a great rate of speed, finally disappearing to the south, following the Laguna Madre. No Black Terns were seen at any other time, nor in any other place, nor is there any evidence of their breeding in the vicinity.

12. *Rynchops nigra*. Black Skimmer. An abundant breeding species. The nesting season was just beginning as we left, many nests containing two eggs on June 2; no nests were found containing more than two eggs. The nests were pretty well scattered about the edge of the island, though the greatest number were near the north-east end. About 400 birds were living on Bird Island, and about 50 on Little Bird, these



Fig. 40. A BROWN PELICAN AT HER NEST.

latter having two eggs in the nest on May 29. The birds were extremely active all day, and their hoarse, grating cries were heard well into the night after other bird sounds had practically ceased. Also, their voices were the first to be heard in the morning. After watching these birds carefully for eight days, the writer has no evidence to offer to show that they feed in the orthodox manner in which they have always been supposed to feed. On the contrary, he feels at the present time that Mr. Arthur (9) is correct when he says that the birds pick up their food while standing in the water. This I saw through powerful binoculars again and again when the birds stood in the shallows, and, though I watched hundreds of the birds "skimming", I never saw the slightest indication that they were catching fish while on the wing.

13. *Anhinga anhinga*. Water Turkey. Three "snake birds" were seen while we were on the way to the island on May 26. These were in every case sitting on old

piles or poles used by the fishermen in their seining operations. On May 30 two Water Turkeys were found at day-break sitting at the tip of the sand spit at the north end of the island. The birds do not breed on the island, as there is no suitable nesting site.

14. *Phalacrocorax vigua mexicanus*. Mexican Cormorant. About a dozen seen in the Laguna Madre during our travels to and from the island. A pair was seen daily at Bird Island, where the birds frequented the spit at the north end, spending hours at a time out of the water in company with the pelicans. It is altogether likely that the species breeds in suitable places along the Texas coast in this region, though we had not the time to hunt for their nests.

15. *Pelecanus erythrorhynchos*. White Pelican. There was no evidence of the presence of this species when we first reached the island. On May 30 a flock of seven was seen on Bird Island, and later in the day the same flock was seen again on Little Bird. These seven were seen daily from this date, and on the afternoon of June 1 a flock of forty-six came to Big Bird, and they were still there when we left the next day. Pearson found them with young already hatched on Little Bird on May 23, 1920; in 1921 either they were not breeding on the islands, or else the nesting had not yet begun. The behavior of the large flock indicated strongly that the nesting was not in progress. Compared with the Brown Pelicans, the White were extremely timid and could not be approached for photographic purposes.

16. *Pelecanus occidentalis*. Brown Pelican. An abundant breeding species on Bird Island only, where there were at least 400 nests as compared with the 48 nests found in 1920 by Pearson. The Pelicans occupied about one quarter of the island, and this region was occupied by no other species except a few Reddish Egrets that nested around the edge of the rookery. Almost every stage in the life history was present. Nests which contained perfectly fresh eggs, the complement not yet completed, were found by the side of nests already deserted by the young which were wandering about in great flocks, but which were not yet old enough to enter the water. Every stage in the development of the young was there: young were watched as they came from the egg—black, naked, hideous little creatures—while other nests showed families in all stages of down development and primary growth. The average number of eggs or young per nest was three. The young leave the nest almost before they are able to walk, and flop around on the ground using the wings and legs in their efforts at locomotion. These young do not wander far, but return to the nest, climbing back into it with the aid of legs, wings and bill. The food consists mainly of mullet (*Mugil cephalus*) and menhaden (*Brevoortia tyrannus*) as shown by regurgitations as well as by a peculiar habit evidenced in a number of cases where perfectly whole, fresh fish were placed in the nest with the young. These the babies pick at for a time, but do not eat, and the fish are allowed to remain in the nest until the stench is terrible. In fact, the whole pelican rookery reeked. The mortality among the young is very great, due largely to the heat. If the young chance to hatch during the absence of the adults, they are almost certain to die as a result of exposure to the unmerciful sun. A number of such deaths were witnessed, occurring within half an hour after hatching. Fully 200 eggs lay on the ground among the nests, decomposing in the heat, and every once in a while one of these would explode, reminding one in more ways than one, of a gas bomb! Many older birds, young well advanced in the wandering stage, were found dead, this being probably due largely to the punishment they receive if they chance to wander within the reach of the bill of an incubating pelican. The old birds whack the babies over the head with a snap of the bill that can be heard amid the din of the rookery for a distance of fifty yards. It is very evident that these blows daze the youngsters, who stagger away drunkenly as a result. For a further account of these birds, the reader is referred to a paper by the writer dealing with this rookery (7).

17. *Anas fulvigula maculosa*. Mottled Duck. Eight representatives of this species were seen en route to the island. These birds were found in little coves or bays of the mainland, and they undoubtedly breed in favorable localities. A single individual was seen sitting on the beach of Little Bird on May 30.

18. *Marila affinis*. Bluebill. A male and two females were seen off the north end of Bird Island on May 29, 30 and 31, on which date they disappeared. They were never seen to fly, and it is possible that they were "cripples" left over from the hunting season. It is altogether possible that such "winged" birds breed locally.

19. *Ajaia ajaja*. Roseate Spoonbill. Three "flamingos" were found on May 30

on Padre Island, just opposite Little Bird Island. They were flushed from a clump of shrubs upon which they were sitting, and flew across Bird Island, as nearly as could be seen, toward the mainland. There was no breeding evidence, but there is no reason why the species should not nest in suitable localities.

20. *Ardea herodias wardi*. Ward Heron. A common breeding species, both on the mainland and on the islands. There is a large colony near Flour Bluff (about 13 miles south of Corpus), the birds breeding high above the ground in trees. Six nests were found on Bird Island, and twenty-three on Little Bird. On the latter island the nests contained fresh eggs, the full complement in many cases not reached, while on Big Bird, a young heron was found already out of the nest. On the islands the nests were built of necessity upon the ground, and were made of huge piles of twigs, grass, weeds, etc., much of which had to be brought either from Padre or the mainland. In



Fig. 41. YOUNG BROWN PELICANS.

many cases Brown Pelicans had used the nests of this heron for their own, and in one case two rotten heron eggs were found in a heron nest occupied by two very recently hatched pelicans. The species also breeds locally on Padre Island.

21. *Egretta candidissima candidissima*. Snowy Egret. A single specimen of this beautiful species was seen on the afternoon of May 30, standing on the beach of Padre Island, just across from Bird Island. The bird permitted close approach, and was not at all timid.

22. *Dichromanassa rufescens*. Reddish Egret. A common breeding species on both Bird Islands. About twenty nests were located on Little Bird, and thirty-seven on Big Bird. These nests contained, on the average, three eggs, which began to hatch on June 1. The nests were built among the succulent vegetation, from two to six inches above the ground, which is the best elevation the birds could obtain under the circum-

stances. No birds in the white phase were seen. The adults were quite timid.

23. *Hydranassa tricolor ruficollis*. Louisiana Heron. An abundant breeding species, somewhat more common than the preceding, on both islands. The nests were very similar in construction, position, and in the condition of the eggs, though there were no young hatched when we left. Distinctly less timid, the birds were, however, unapproachable for photographic purposes.

24. *Florida caerulea*. Little Blue Heron. Five individuals of this species were seen on Padre on June 1. There is no evidence of breeding in the vicinity.

25. *Butorides virescens virescens*. Green Heron. A breeding species locally along the mainland, where the birds nest in low trees, often mesquite. Several visited the inland lagoon on Bird Island on May 27, 30, and June 2. Seen twice en route to the island, flying near the shore, and once on Padre on May 30.

26. *Nycticorax nycticorax naevius*. Black-crowned Night Heron. Seen only on Padre Island, where four birds were seen on June 1. These birds seemed very much concerned at our presence, and their actions indicated the possibility of a nest. Heard often during the night, when their hoarse croaking indicated that the birds were going toward the mainland.

27. *Gallinula galeata*. Florida Gallinule. A single bird of the species, in full summer plumage, was in the lagoon on the island when we arrived. It left at once, but was back again the next morning. When the bird left this time it did not return.

28. *Fulica americana*. Coot. A single Coot was present on Big Bird Island all the time we were there. It frequented the sand spit at the north end, and was always in close association with the pelicans. Whenever the pelicans left the island, the coot went along; when they returned, it returned also. There was no sign of a mate. Several coots were seen near the mainland at various times.

29. *Himantopus mexicanus*. Black-necked Stilt. One individual of this beautiful species—the first the writer had seen alive—was found wading at the edge of the water on Little Bird Island on May 29. As we approached, it flew a short distance, then settled on the water and swam toward Padre. No breeding evidence.

30. *Macrorhamphus griseus griseus*. Dowitcher. One representative of this species was seen twice on Little Bird. As the species is rare in this region during the late spring, and as the bird showed marked difficulties in flying, I am led to the belief that the bird was a stranded "cripple" left over from the shooting season.

31. *Pelidna alpina sakhalina*. Red-backed Sandpiper. A flock of nine of these birds was seen May 27, 28, and 29, on Bird Island. The birds frequented the shore-line and the edge of the large lagoon within the island, and were very tame. Remained at the south end of the island most of the time, often coming within a few yards of our camp. Migrants only.

32. *Calidris leucophaea*. Sanderling. Two dead individuals were found at the north end of Little Bird Island, badly disintegrated, but identifiable by the absence of the hind toe. Migrants only.

33. *Totanus melanoleucus*. Greater Yellow-legs. Three Greater Yellow-legs were seen on Bird Island the day we arrived, but were not seen again. Padre Island, May 30, two; Little Bird Island, May 31, three. Migrant only.

34. *Totanus flavipes*. Lesser Yellow-legs. A little flock of six frequented the south end of Bird Island near camp during our entire stay, seldom leaving the point unless frightened by our approach.

35. *Numenius americanus*. Long-billed Curlew. Two birds of this species were standing near the water on Little Bird when we approached it on May 31. The birds were so tame that we rowed past within twenty-five feet of them. These birds remained on the island all that day, leaving toward dusk.

36. *Oxyechus vociferus*. Killdeer. A common breeding species along the mainland and on Padre Island, where young birds were already hatched on May 30. Several of the species were seen on Bird Island, where they remained only for a few hours.

37. *Aegialitis nivosa*. Snowy Plover. Several pairs of this plover were seen on Padre Island, and a single bird visited Bird Island on May 30. From the behavior of the birds on Padre, I have no doubt that they breed there, though the nests were not found.

38. *Ochthodromus wilsonius*. Wilson Plover. A common species along the coast, and seen on all of the islands. Breeds in suitable places, but nesting had not yet begun when the writer left the region.

39. *Haematopus palliatus*. Oyster-catcher. I was considerably surprised at the scarcity of this bird in such a favorable location. Only three of the species were seen, two on Padre and one on Bird Island. Probably a breeding species, and very likely more common than present data would seem to indicate.

40. *Colinus virginianus texanus*. Texas Quail. One small flock of seven was seen on Padre, but the birds could be heard daily both on Padre and on the mainland. Data indicated the species as common, and it breeds on Padre. None was seen on Bird Island, and it is more than likely that the Padre Island birds do not travel across the Laguna Madre to the mainland, as there is an abundance of food on the island.

41. *Zenaidura macroura carolinensis*. Mourning Dove. A breeding species on both of the Bird Islands. On Big Bird five nests, each containing two fresh eggs, were found. These nests were in all cases among the nests of the Laughing Gulls. Breeds

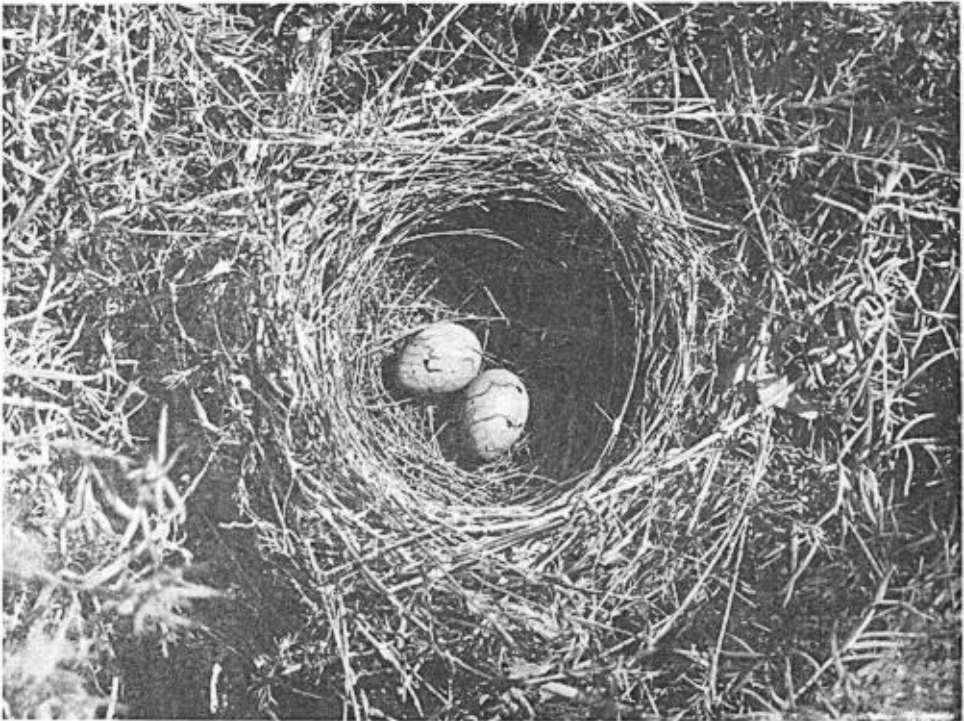


Fig. 42. NEST AND EGGS OF THE GREAT-TAILED GRACKLE.

also very commonly on Padre Island. The doves were seen repeatedly going to the mainland for their food.

42. *Chaemepelia passerina pallescens*. Mexican Ground Dove. About ten of this small species were seen, both on Padre Island and on the mainland, though none happened to be seen on Bird Island. Most likely a breeding species in the vicinity, but no nests were found.

43. *Scardafella inca*. Inca Dove. Four were seen between Corpus Christi and Flour Bluff, and two more on Padre Island on May 31. Also probably a breeding species.

44. *Cathartes aura septentrionalis*. Turkey Vulture. A common breeding species on the mainland, and in suitable places on Padre. Seen daily flying high in the air. Occasionally the birds visit Bird Island, probably attracted there by an odor that would drive most other creatures away!

45. *Cathartes urubu*. Black Vulture. Distinctly less common than the preceding species, but seen almost daily from Bird Island. The species breeds commonly on the mainland, and also probably on Padre.



46. *Circus hudsonius*. Marsh Hawk. A common breeding species in the low, marshy regions of the coast, seen only once over the Laguna Madre near Bird Island. A considerable number was noted between Corpus and Flour Bluff, where there is much low country.

47. *Parabuteo unicinctus harrisi*. Harris Hawk. A familiar daily sight was the high-circling flight of this characteristic south Texas hawk. Between Corpus and Flour Bluff nine of these large hawks were passed, sitting quietly on telegraph poles along the road, indifferent to the traffic beneath them. Probably breeds on the mainland, though no attempt was made to find a nest.

48. *Falco sparverius sparverius*. Sparrow Hawk. A very common breeding species on the mainland and on Padre, and seen but twice from Bird Island. The species lives almost entirely upon the large grasshoppers so abundant in the region. One of the species was found dead on Bird Island.

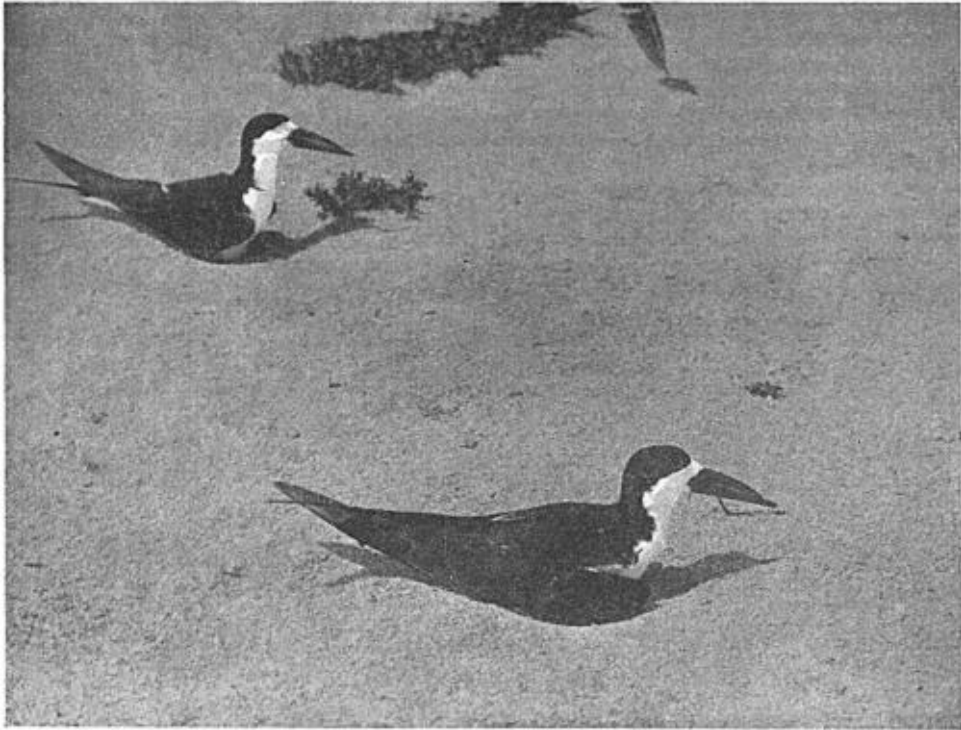


Fig. 43. BLACK SKIMMERS INCUBATING.

49. *Polyborus cheriway*. Audubon Caracara. This queer looking "Mexican buzzard" was seen between Corpus and Flour Bluff—a small flock of six standing on the ground near the road. Again, a single individual visited the pelican rookery on Bird Island on June 1, evidently in search of fish, which it found. Standing on the sand spit at the north end of the island, the bird leisurely tore up and devoured a large mullet.

50. *Geococcyx californianus*. Road-runner. Common on Padre Island only, where breeds in the mesquite thickets. This island seems to be an ideal place for the birds, there being fine breeding sites, and great open sand stretches across which the birds race with most astonishing speed. There is an abundance of insect and reptilian life on the island to afford the birds plenty of food.

51. *Coccyzus americanus americanus*. Yellow-billed Cuckoo. Seen several times on Padre Island, where also a nest of the species was found in a mesquite thicket. A dead specimen was found on Little Bird Island on May 30.

52. *Ceryle alcyon*. Belted Kingfisher. Several seen near Corpus Christi, and again at Flour Bluff, where there are good nesting grounds. A single bird flew, rattling, over Bird Island on May 27, heading for Padre, where there is also a local abundance of good nesting sites. Not as common as one would expect.

53. *Chordeiles acutipennis texensis*. Texas Nighthawk. Seen from shortly before sun-down until dark, and after dark their call-notes could be heard coming from the black void overhead, even above the muttering of the restless birds on the island. Seen over Padre repeatedly, and the species undoubtedly breeds in the vicinity.

54. *Archilochus colubris*. Ruby-throated Hummingbird. Seen twice on Padre, both times the birds coming to rest on the smaller branches of a mesquite tree. On May 29 a male flashed by camp on Bird Island, headed for the mainland. No breeding evidence at hand, though the species is known to breed near Corpus.

55. *Muscivora forficata*. Scissor-tailed Flycatcher. Seen several times on Padre



Fig. 44. PORTRAIT OF A LAUGHING GULL INCUBATING.

Island, and often on the mainland, in both of which places the species nests. On Padre a bird was seen carrying a good-sized grasshopper, but no nest was found in the very limited time available. Often seen flying over Bird Island, going either to or from the mainland.

56. *Sayornis phoebe*. Phoebe. Common on Padre and on the mainland, but there is nothing to attract the species to Bird Island. On Padre two nests were found under the eaves of an uninhabited shack a little south of Bird Island. Both nests were empty, but gave evidence of having been very recently inhabited.

57. *Cyanocitta cristata cristata*. Blue Jay. Common on the mainland, where the species breeds in abundance. Seen also on Padre, though there is no evidence of breeding on the island. Visited Bird Island several times in passage between Padre and the mainland.

58. *Corvus brachyrhynchos brachyrhynchos*. Crow. Common throughout the re-

gion, breeding (early in April) on the mainland and on Padre. Seen only as transients over Bird Island.

59. *Molothrus ater ater*. Cowbird. Common along the main coastal region, particularly between Corpus and Flour Bluff.

60. *Molothrus ater obscurus*. Dwarf Cowbird. This subspecies, almost indistinguishable from the preceding when seen in the field, was found on Padre Island, May 31, as well as at Flour Bluff on May 26. Decidedly less common than its larger relative.

61. *Megaquiscalus major macrourus*. Great-tailed Grackle. An abundant breeding species on both Bird Islands. The nest is a beautifully built affair of grass, very deep and solidly constructed, located just off of the ground in the succulent vegetation. No nest contained more than three eggs, a majority of them containing but two. All

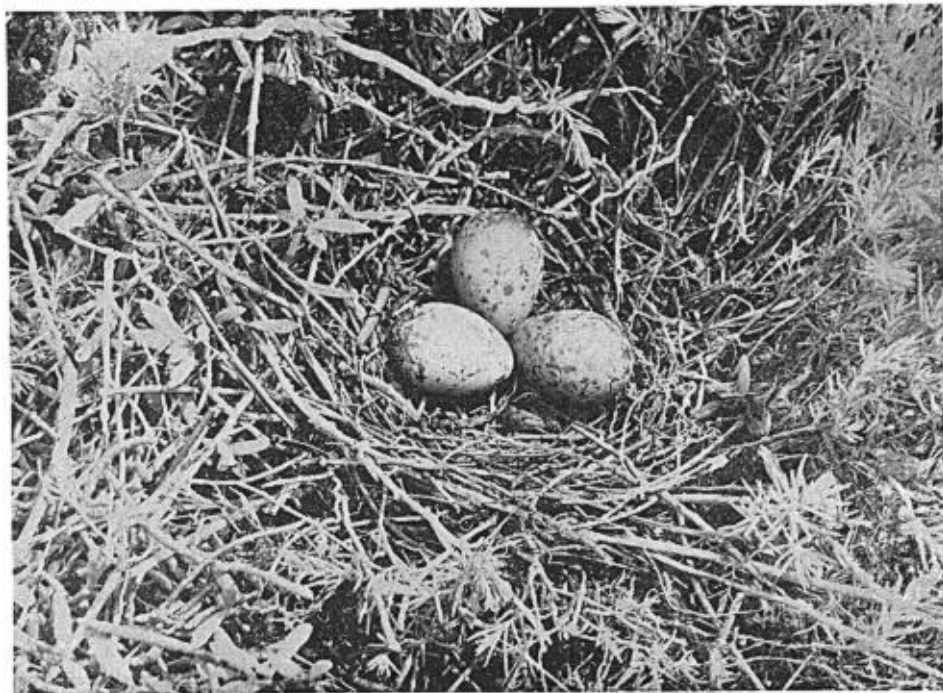


Fig. 45. NEST AND EGGS OF THE LAUGHING GULL.

the eggs were well along in incubation, and some nests contained young birds well feathered. Pemberton (8) speaks of the depredation of these birds on the eggs of the Reddish Egret. On Bird Island these two species were living quietly and harmoniously side by side.

62. *Cardinalis cardinalis cardinalis*. Cardinal. A common breeding species on the mainland and on Padre, not seen on Bird Island.

63. *Passerina ciris*. Painted Bunting. A single full-plumaged male was seen on Padre on May 31, the only evidence at hand of the presence of the species.

64. *Progne subis subis*. Purple Martin. An abundant breeding species, particularly near Corpus Christi. Found nesting near the uninhabited shack on Padre, the young birds being on the wing on May 31.

65. *Iridoprocne bicolor*. Tree Swallow. A common breeding species in suitable localities on the mainland. Occasionally seen over Bird Island, flying low over the Laguna Madre in pursuit of insects.

66. *Mimus polyglottos leucopterus*. Western Mockingbird. Abundant breeding species on Padre and the mainland.

67. *Toxostoma curvirostre curvirostre*. Curved-billed Thrasher. Several thrashers of this species were seen, and the species no doubt breeds, on Padre Island, as young birds were found.

68. *Penthestes carolinensis agilis*. Texas Chickadee. A common breeding species on Padre, seen also on several occasions on the mainland. Young birds were already out of the nest on May 31.

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## FROM FIELD AND STUDY

**Top Speed of the Road-runner.**—While motoring along a paved road, August 15, 1921, I had an unusual opportunity of recording the speed of the fast-running Road-runner (*Geococcyx californianus*). The road was situated just above the sea in a private estate known as the Hope Ranch, near Santa Barbara. We were just entering a long driveway bordered on either side with palms, and coasting along on about a three percent grade, when a Road-runner appeared a few rods ahead. The car gained on the bird until about five yards separated us, and I saw it was running at its utmost speed. I instructed my friend, who was driving, not to press him further, and for fully three hundred yards the bird ran from the huge monster in pursuit, the while the speedometer registered exactly fifteen miles per hour. When finally we approached very closely, the bird gave up and flew into a palm, where I plainly saw it, beak agape and apparently much fatigued from the unusual exertion. Shortly after, I saw it sail to the ground and trot slowly away.

The proximity of the car and the closely grown palms were undoubtedly the two obstacles that kept the Road-runner on a straight-away course. It seemed baffled; from its viewpoint the palms probably appeared like a solid hedge. During the run, the bird's position was almost a straight line from beak to tip of tail. The tail drooped a little below the back and was frequently wagged up and down.—H. H. SHELDON, *Santa Barbara, California, June 15, 1922.*

**A Southern Station for the Harlequin Duck.**—The southernmost record-station for *Histrionicus histrionicus* on the Pacific Coast previous to the present note is Carmel Point, Monterey County, California (Beck, Proc. Calif. Acad. Sci., 4th ser., III, 1910, p. 69).

About noon on October 8, 1918, at a place on the coast of San Luis Obispo County