

COBB ISLAND

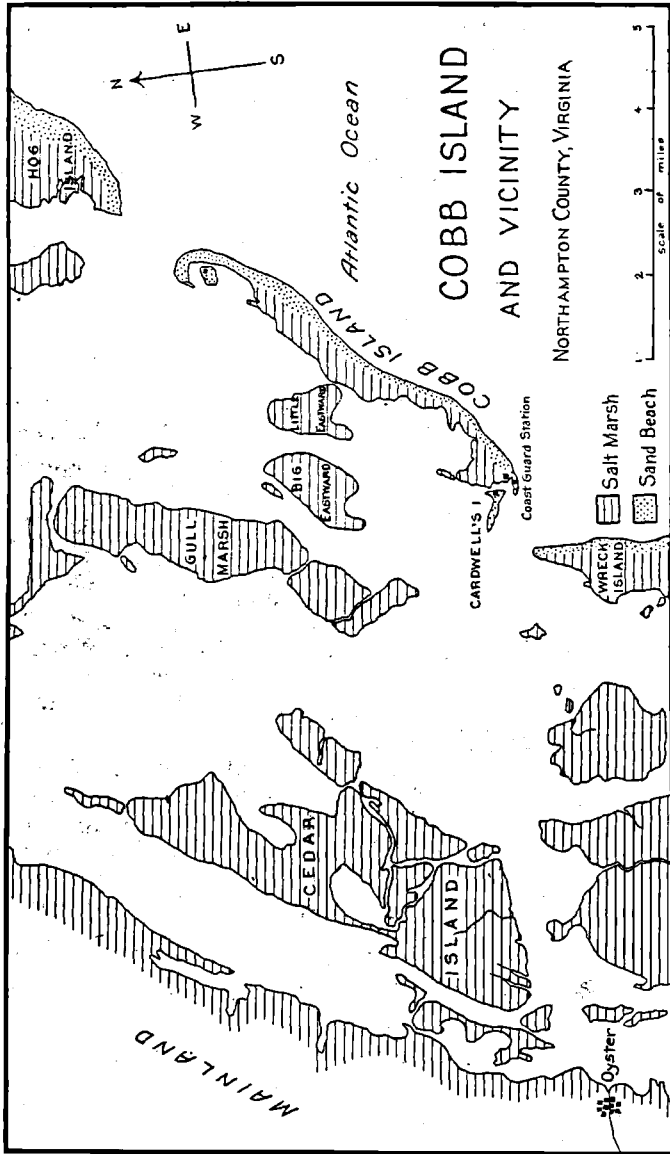
By O. L. AUSTIN, JR.

DURING the last three decades Cobb Island and its seabird rookeries have become more or less a tradition among ornithologists. Although the general impression held by those who have never been there is slightly distorted and exaggerated, this reputation is not entirely undeserved. Naturally the region is no longer the avian paradise it was during the middle of the nineteenth century, before the plume-hunters and market gunners started their deadly and despicable work. But, thanks to the efforts of the Audubon Society, certain species still breed there plentifully, and in much larger numbers than they did thirty years ago.

The accompanying map affords a clearer conception of the size and shape of the island and its environs than any word picture that might be painted. Cobb Island itself is a narrow sand-spit five miles long, forming a link in the chain of ever-changing barrier sand beaches lying off the Virginia and Carolina coasts. Between it and the mainland eight miles away is a shallow sound known as the "Broadwater" in which there are numerous marshy islets, some of only a few acres, others of several square miles in extent most of which support extensive rookeries of marsh-nesting species. Hence, while not strictly a part of Cobb Island proper these islands form with it a single, homogeneous regional entity, which must be considered as such in any survey of avian conditions in the district.

The pertinent history of Cobb Island goes back almost a century. It was about 1840 that Nathan Cobb left Eastham, Cape Cod, Massachusetts, in his schooner to trade along the Virginia Capes. W. H. Fisher (*Osprey*, Vol. I, No. 8, April, 1897, p. 107) says he

"was so struck with the surrounding country that on his return home he had a small frame house built, placed it on the deck of his schooner, and returning to Northampton County he set it on the mainland opposite to Cobb's Island and opened a store to trade with the surrounding people. After he had been located there for some time, one day a small colored girl was sent down to make a purchase, but returning with empty hands, 'Missus,' she said, 'there am no store down on the shore,' and when her mistress went down to see about it herself she found it to be a fact. Old Nathan had purchased Cobb's Island, paying therefor \$20 in cash and 100 bushels of salt. Then building himself a raft he floated his house out to his newly acquired domain."



The accompanying gummed slip is to be pasted below the table accompanying the Cobb Island paper in the January 1932 *Bird-Banding*, and the map of Cobb Island is to be substituted in place of the map having the tabulation title Cut out old map along its top border and paste in new map.

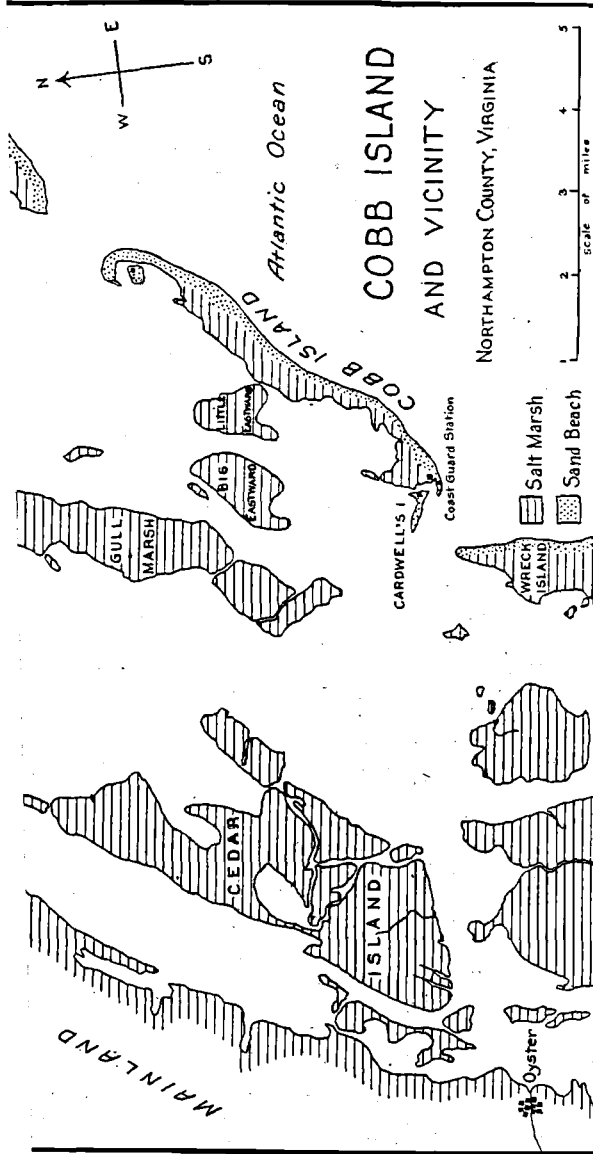


TABLE GIVING ESTIMATES OF BIRD POPULATION OF COBB ISLAND, 1875 TO 1931

The island has ever since born his name, and the greater part of it is still owned by his descendants. It appears on maps and charts as "Cobb Island," but it is *frequently* referred to in literature in the possessive case.

When "Old Nathan" settled there, the island was possibly seven miles long, two miles longer than it is now. It was likewise much wider, especially at the southern end, where its width is reported to have been almost a half-mile. The soil produced excellent crops. Cabbages that would fill a bushel basket, mammoth tomatoes, turnips as big as watermelons, and squashes a man couldn't lift are still talked of by the elder Cobbs. There were trees on the island—maples and poplars planted about the lower end and scrubby cedars farther up. Live-stock thrived, and cattle, pigs, sheep, and poultry were raised, all of which was made possible by the existence of two artesian wells at the southern end, where the Cobb farm was located.

From all accounts the place teemed with birds. Ducks and shorebirds abounded during the flight seasons, as well as gulls, terns, and rails at nesting time. Between the markets for game-birds and eggs in Philadelphia and New York and the steady demand for plumes by the millinery trade, an excellent living could be derived from the *res naturae* in the vicinity alone.

Nathan and his sons lived for years on the produce of the farm and the bountiful gifts nature showered at their door. They sold a strip of land at the lower end to the United States government, upon which a Coast Guard station was established about 1876. From then until the turn of the century the island was in its heyday. Originally a paradise for pot-hunters and sportsmen, as the game dwindled it next became a famous summer resort. According to Fisher (*idem*),

"[Nathan] and others built and opened a hotel, in which part of the lumber used was drift and wreckage picked up on the beach. This finally passed through several hands, and is now [1897] controlled by a syndicate from Lynchburg, Va., which paid \$20,000 for the hotel, some cottages, and 25 acres of ground, some five years ago."

Practically all the buildings were clustered around the artesian wells on the southern end of the island. This being before motor craft had come into general use, most of the traffic with the mainland was done with sail-boats, which, being dependent on the wind and weather, were very uncertain. Nevertheless, people came from near and far to enjoy the hunting, the egging, the fishing, and the bathing, and the place prospered.

The bird life, which had already begun to disappear, now dropped off alarmingly, owing mainly to the efforts of the

eggers and the plume-hunters. The Royal and Caspian Terns were extirpated, and the Least Tern was brought to the verge of local extinction. The other terns, the Skimmer, and the Laughing Gull dwindled in numbers until but few were left, and the Oyster-catcher and the Willet almost disappeared. It was about this time that the Audubon Society started its good work, and legal protection was given the birds. Also, the birds were aided tremendously by a series of winter gales of unusual intensity which in 1896 destroyed the greater part of the southern end of the island.

In the *Baltimore Sun* for October 19, 1896, appears the following account of the disaster:—

"After quite an adventurous trip *The Sun's* correspondent succeeded in reaching Cobb's Island yesterday by means of a small sailboat, in company with several other visitors. . . . Our boat was the first one to carry a party to the island since the storm, and as yet the seas in the vicinity of Cobb's Island are running so very high that it is really perilous for a boat of small dimensions to attempt the trip.

"We found about twenty persons on the island, including the members of the life-saving station, all of whom were in a very sorrowful mood on account of the almost entire destruction of the island and the property thereon. One of the most prominent citizens of the island took his loss in the most philosophical manner. He believes that this, as well as the previous storms encountered on the island during the past few years, is only Divine warning for them to vacate the island entirely and he thought it would not be long before Cobb's Island would be many feet under the surface of the broad Atlantic ocean. While only a few of the houses were washed entirely away, all of them suffered more or less damage. The water was fully a foot deep over the entire island, and the seas which rolled were from 40 to 50 feet in height.

"The Baltimore Cottage . . . which was previous to the storm seventy-five yards from the beach, is now a total wreck being pounded to pieces by the immense seas which swept the island. Several other cottages were about half buried in the sand. . . . The hotel is a complete wreck. . . . About three feet of sand stands in the dancing pavillion on the first floor. The bar room, billiard room, bowling alley and several other small buildings were tumbled down in one heap and broken up so they were of no use whatever. There are several wells of fresh water now covered by the ocean that were previous to the storm in the barnyard of Mr. Cobb, used for watering his stock."

The relentless, never-ceasing forces of erosion have left their mark. The pounding sea has worn the island down in some places, and built up additions to it in others. Successive storms, after the main disaster, razed the rest of the buildings, with the exception of two cottages, in the center of the island, belonging to the Cobbs, and the Coast Guard station (it was the Life-Saving station in those days) which had fortunately been moved back from the shore the preceding summer. Where the old farm and the hotel buildings were situated back in the 90's the main channel

now connects the Broadwater with the ocean. And Pig Island, which used to lie a half-mile northward of Cobb Island, is now a part of it.

The island never recovered entirely from the initial blow, but the Cobbs are a hardy stock, and are not to be discouraged by a little thing like a flood. They built one of their remaining cottages into a new hotel, raising it up on piles so that high water could not flood the lower floors, and resuscitated the old business. Many of their old visitors returned, and some new ones, but the trade dwindled steadily until 1930, when, as a final catastrophe the building burned to the ground, leaving besides the Coast Guard station but one solitary "cottage on stilts," the last remnant of the island's past glory. Here George Cobb, one of Nathan's grandsons, still spends most of his time. He is "fixin' it up" so that he may soon board a few summer visitors again.

Even though the Cobb Island settlement failed, economically speaking, the near-by rookeries continued to suffer. Egging was allowed all the spring up to July 4th by Virginia law until the signing of the International Migratory Bird Treaty in 1916. The habits of years are hard to break, and the commercial fishermen still kept up their regular practice of egging whenever they chose, despite the law. Natives from the mainland continued to visit the island to gather messes of young gulls for the pot, and to shoot all manner of birds out of season. So the Audubon Society had George Cobb appointed a Deputy United States Game Protector, and employ him as such during the nesting season to patrol the rookeries.

The easiest way to reach Cobb Island is to drive by automobile to the little town of Oyster, which lies about five miles north of Cape Charles, in Northampton County, Virginia. Here one may hire a motor-boat to transport him the eight miles to the island—a passage which, with the crafts available, usually requires at least two hours. The rookeries cannot be worked satisfactorily from the mainland, as too much time is consumed daily in reaching them. Much more efficient results may be attained by living on Cobb Island and working the colonies from there. The main difficulty to be encountered in the living conditions on the island to-day is the lack of good drinking water. The only fresh water to be found there is rain-water caught off the roofs and stored in large iron tanks. It is neither palatable nor good for the digestion. Sea food is plentiful—there are clams and oysters to be had for the gathering, crabs in abundance, and pan-fish for the catching—but it is necessary to take staples with one from the mainland.

My wife and I left Oyster with George Cobb on June 23d and spent two delightful and profitable weeks with him in his cottage on the island. It is difficult to imagine how we could have accomplished our aims without the assistance of "Cap'n George." The fortunes of the island have been his for over sixty years. but his hale and youthful appearance belies his age. A kindly and temperate man (as are most who have lived close to the elements) he is proud that he now has an active part in preserving the birds, for as a boy he saw the extirpation of the Royal and Least Terns by the plume-hunters, and he has witnessed every subsequent stage of the battle for survival waged by the avian inhabitants of the region he loves. The shallow Broadwater was his primer; the intricacies of its narrow, tortuous channels and the vagaries of its tides and currents are to him an open book. We spent every day afield with him, making the rounds of the rookeries in his shallow-draft scow with its "one lung" motor. Nor did a day pass that his intimate knowledge of the region and the birds did not prove invaluable to our investigations.

The Cobb Island rookeries may be divided into two groups—first the beach colonies, and second the marsh colonies. In the beach colonies nest Black Skimmers, Common Terns, Gull-billed Terns, Least Terns, Wilson's Plovers, Oyster-catchers, and Willets. In the marsh colonies are Laughing Gulls, Forster's Terns, and Clapper Rails. The first to which we turned our attentions were the beach colonies, of which there are two on Cobb Island itself and a third on Cardwell's Island, a small, recently formed sand-bar at the southwestern corner of Cobb Island, from which it is separated by a narrow strait a hundred yards wide. The largest of these three colonies is spread over a mile and a half of beach at the extreme northern end of Cobb Island, on what used to be Pig Island. I estimated it to contain:—

Black Skimmer	. . . . .	600	pairs
Common Tern	. . . . .	150	"
Gull-billed Tern	. . . . .	20	"
Least Tern	. . . . .	20	"
Willet	. . . . .	2	"
Oyster-catcher	. . . . .	1	"
Wilson's Plover	. . . . .	3	"

The Cardwell Island colony is next in size. It occupies a quarter-mile of the beach on the southern side of the island, and as it is only a short way from the Cobb cottage, we spent more time on it than on any of the other beach colonies. It contained:—

Black Skimmer	. . . . .	300	pairs
Common Tern	. . . . .	27	"
Gull-billed Tern	. . . . .	4	"
Least Tern	. . . . .	18	"
Wilson's Plover	. . . . .	2	"
Oyster-catcher	. . . . .	2	"

The third rookery is on the outer beach of Cobb Island about two miles from the southern end. It is scattered along a mile front, with the various species inhabiting it more or less grouping themselves together in little colonies within it. Its inhabitants were:—

Black Skimmer	. . . . .	125	Pairs
Common Tern	. . . . .	20	"
Gull-billed Tern	. . . . .	2	"
Least Tern	. . . . .	40	"
Wilson's Plover	. . . . .	3	"
Oyster-catcher	. . . . .	1	"
Willet	. . . . .	2	"

There is one other sizeable colony of beach-nesting birds in the vicinity, on Wreck Island, several miles south of Cobb Island. I did not have an opportunity to visit it, but according to Cap'n George it is about the size of the Cardwell Island rookery.

Each of these colonies is located similarly on the flat, open, sandy, shell-littered beach, above the limit of normal summer tides, usually on the stretches washed clean of débris by winter gales. It is difficult to advance any reason for the selection of the sites, for, were there birds enough, it seems as if the whole stretch of beach should be inhabited. The localities selected for rookeries cannot be differentiated by any criteria visible to the human eye from the miles of empty shore adjoining them. There is certainly food enough in the vicinity to support many times the present population, and since the birds are to be observed fishing in all the near-by waters, the proximity of an adequate supply of it to adjacent unoccupied portions of the beach is probable. Hence the closeness of food in this case is evidently not a factor in site-selection.

It is possible to attain a high degree of efficiency in banding young Skimmers and terns, for they are out in the open where it is easy to find them. During my preliminary survey of the beach colonies on June 24th and 25th incubation was just being completed. The young began to hatch in numbers two days

later, and July 5th found the majority of them large enough for banding. In the Cardwell Island rookery that day we banded fully ninety per cent of all the young available, which exhausted our supply of the No. 4 bands we were using on Skimmers. Our totals there are as follows:—

Gull-billed Tern	1
Common Tern	31
Least Tern	14
Black Skimmer	550

If one were to return to the island another season, and planned to cover all these colonies, on the four rookeries it should be possible to band at least 1500 Black Skimmers, possibly 2000 in a good year, and perhaps 500 terns of the three species, 1000 if one is fortunate and diligent. If it were not for the Skimmers, however, the numbers of beach-nesting birds that might be banded would hardly repay the operator for the time that must be spent in accomplishing it. What really makes banding operations in the region worth while is the birds in the marsh colonies, but it would be rather senseless not to band what of the beach-nesting birds are available while one is in the vicinity.

The marsh rookeries on the islands in the Broadwater will repay a visit from every standpoint. Here Laughing Gulls, Forster's Terns, and Clapper Rails nest in large numbers. Most of the islands, which are merely large mud-banks held together against the poundings of the winter storms by a thick cover of sedges, project barely above the level of the water during normal high tides, and many of them are completely flooded during lunar inundations. Next to depredations by man, these monthly high courses of tides are the birds' worst hazard. If they occur with westerly winds or during calm weather, little damage is done beyond the loss of a few nestlings devoured by the crabs which follow the tide up into the grass. But should an easterly gale accompany them, the rookeries are likely to be wiped out. A high wind from this quarter not only piles the water shoreward to an even greater height, but creates a choppy sea which sweeps through the grass, dislodges all the nests, and carries them with their contents out into deep water to their destruction.

So shallow is the water in the immediate vicinity of these islands, however, that at half tide they are surrounded by miles of soft, sticky mud-flats into which one sinks knee deep and over which progress is well-nigh impossible. No channels approach nearer than a quarter-mile to the rookeries, and it is hence impossible to reach them even with a light skiff except when the water is high enough to cover the intervening flats.

The day's work must be mapped out accordingly. When low tide occurs during the middle of the day, one can land on the islands early in the morning, stay throughout the ebb, and leave late in the afternoon. Otherwise one must visit them over the high tide, landing on the flood, and leaving on the ebb, which allows about five hours for work at best. It requires careful planning and an intimate acquaintance with local conditions to be able to utilize one's time to the best advantage.

I estimated the population of the principal marsh colonies to be as follows:—

<i>Little Eastward Island</i>		
Laughing Gull		1200 pairs
Forster's Tern		52 "
Clapper Rail		22 "
(actual count, probably many overlooked)		
<i>Big Eastward Island</i>		
Laughing Gull		1500 pairs
Forster's Tern		5 "
Clapper Rail		38 "
(actual count, probably many overlooked)		
<i>Gull Marsh Island</i>		
Laughing Gull		4000 pairs
Forster's Tern		30 "
Clapper Rail		?
(many—in same proportion as on other rookeries, but no count made)		
<i>Cedar Island</i>		
Laughing Gull		500 pairs
Forster's Tern		350 "
(in two colonies)		
Clapper Rail		?
(many—no estimate made)		

There are from five to twenty-five pairs of Laughing Gulls to the acre in the main rookeries, the degree of concentration varying in proportion to the thickness and the height of the sedges. The nests are bulky structures of eel-grass and seaweed matted on top of the sedges, which must be thick enough when tramped down to support the nest off the ground and high enough to afford hiding-places for the young. The nests will float in the event of unusually high water, but, the higher they are built, the less risk they incur of being flooded by the lunar tides.

The Laughing Gulls commenced to hatch June 24th, and the ensuing week saw most of the young emerge. They usually remain in the nest during their first two days in the outside world, but at this time their tarsi are too small to hold the No. 5 band required for the adult. As they grow they acquire rapidly a measure of caution, so that when they have attained banding

size, they leave the nest at the first sign of danger to hide in the vegetation near by. However, until their flight feathers are well-developed, some three weeks after hatching, they seldom stray more than fifteen or twenty feet from the nest, and it is not particularly difficult to locate them. My method was simply to search in ever widening circles through the sedges around each nest until I located the two or three youngsters belonging to it. They frequently hide close to the crude pathway worn down one side of the nest out into the sedges, and I soon became proficient at finding them. My daily "catch" increased from two hundred when I started to five hundred before I finished. (The work is not the cleanest in the world—the birds' legs are always coated with sticky mud, which immediately transfers itself to the hands and thence to the trousers. It is well to wear clothes which may be washed easily in salt water.)

On July 6th we were forced to suspend our operations because of lack of bands. Although we had gone over only one third of the rookeries, and had handled probably 60 per cent of the young in the area covered, we banded 2600 young gulls. There were still a considerable portion of young too small to work with and many eggs unhatched. I judge the most propitious time for banding on the marsh rookeries should be the two weeks commencing July 4th. I believe two men working systematically through this period could band ten thousand Laughing Gulls.

The abundance and distribution of Forster's Tern during the breeding season depends largely on the availability of nesting sites for it. The species invariably deposits its eggs in shallow depressions in the thick mats of seaweed, particularly eel-grass, marooned atop the sedges by the high spring tides. I found small colonies of them scattered here and there throughout the rookeries wherever the vagaries of wind and tide during the preceding months had left the requisite carpet of *Zostera*. Their breeding is evidently considerably later than that of the Laughing Gulls surrounding them, for most of the eggs were just commencing to hatch on July 6th, the day of our departure. The nests are so scattered, and the young so difficult to locate after they leave the nest (a day or so after hatching), that I doubt whether more than five hundred individuals could be banded on the rookeries in any one season, even under optimum conditions.

The habits of Forster's Tern are markedly different from those of the closely related Common Tern. The whiter plumage and paler bill of the former are readily distinguishable in the field when light conditions are favorable, but the two species can be told apart most easily by their alarm notes. The familiar cry of the Common Tern against invaders is a rasping descending

Observers (See Bibliography)	1875	1880	1892	1901	1902	1902	1903	1907	1909	1930	1931
Laughing Gull	Most abundant		Common	About 1000	About 4000	Several hundred		Abundant	2000	Many hundreds	1200 pairs
Gull-billed Tern			Mentioned	About 1000	About 300	16		4 pairs	16	A few	26 pairs
Caspian Tern		A few	0	0	0	0		0	0	0	0
Royal Tern	A few	1000 pairs	0	0	0	0		0	0	0	0
Forster's Tern	A few (Had not begun to nest)		Considerable number		About 600 (Incl. Common)	Small number		A few (200 prs. on Wreck Isl.)	0	Small colony	437 pairs
Common Tern	Very common		Considerable number	About 200	About 600 (Incl. Forster's)	Several hundred		200 pairs	300	Had not begun to rest	200 pairs
Least Tern	Colonies of 50 pairs apart all along the beach		One seen					0	0	A few	78 pairs
Black Skimmer	Flocks seen (Had not begun to nest)		Large number	About 4000	About 4000	Thou- sands	New Colony of 1000	Large numbers	300	Many hundreds	1025 pairs
Clapper Rail	Abundant		Considerable number		About 2000			Abundant	Abundant	Common	Common
Willet	Large numbers		5 pairs	2 pairs	4 pairs	2		2	4		4 pairs
Wilson's Plover	12 pairs		Not uncommon	2 pairs	2 pairs	2	30	4	0		8 pairs
Oyster-catcher	6 pairs		Several pairs	12 pairs	4 pairs	2		4	0		4 pairs

teccarr. That of Forster's Tern is much weaker and softer, and holds its pitch. These "marsh terns" are much shyer and wilder on the breeding grounds than their better-known relatives, and when their territory is invaded by the bander they circle high overhead, well out of gun-range. I have scarcely ever worked in colonies of Common, Arctic, or Roseate Terns without being pecked on the head by the enraged adults, but never once, even where the nests were most abundant, did a Forster's Tern venture even to swoop at me.

It is difficult to estimate the number of Clapper Rails now breeding in the Cobb Island region with any degree of accuracy. Nests are constantly encountered in all the rookeries, frequently built close to the gull nests, and in one case within five feet of a colony of Forster's Tern. But they are so well camouflaged and hard to find that one can never be sure that all of them have been counted. Nevertheless, judging by the descriptions in literature of past conditions, the Clapper Rails do not seem to me to be as numerous as they were two decades ago.

In about half the nests at the time of our visit the large clutches (of five to fourteen eggs each) were still being incubated. Those in the other nests had evidently hatched, but so secretive and well able to hide in the grass are the chicks, that we saw but two broods of young, of which we were able to capture and band only eight. As yet, of course, there has been devised no system whereby *Rallidæ* may be captured in large enough quantities to make special efforts to band them worth while.

The accompanying table is based on the estimates of all the investigators who have visited the island in the past and recorded their findings in literature. The percentage of error in it is large, and it hardly gives a fair picture, for not only does the time of year the various censuses were made vary by as much as six weeks in some instances, but in very few cases did the authors trouble to make an actual count of the birds they observed, especially in the more abundant species. Statements such as "abundant," "many hundreds," "a few," or "not uncommon" are of very questionable value for comparison. It is likewise unfortunate that there is no way of allowing for the idiosyncrasies of individual observers, no two of whom ever see the same number of birds in the same place at the same time (compare, for instance, the two columns for 1902). Nevertheless the table affords us, inaccurate and vague as it is, as good an estimate of the variations and fluctuations of the avian population in the region as it is possible to obtain. It is self-explanatory, but it illustrates several things worthy of note.

Two species, the Royal Tern and the Caspian Tern, never

reappeared after their extirpation fifty years ago. The Least Tern, however, which was totally absent from the region from 1892 until sometime after 1909, has made an excellent comeback. The Laughing Gull has reacted splendidly to protection, and is now more abundant than it has been since 1875. The Black Skimmer is holding its own, and perhaps increasing slightly, as are the Gull-billed, Common, and Forster's Terns. The Oyster-catcher and the Wilson's Plover are hardly less common than they ever were, but the Willet has never recovered entirely from the persecution it received during the latter part of the nineteenth century.

There are some depredations still committed in the rookeries. The commercial fishermen are as fond of sea-birds' eggs and young gulls as they ever were, and they have become even more disrespectful of the law in recent years. It is next to impossible for one warden to patrol the many miles of rookeries efficiently, but conditions are so much better than they have been in the past two-score of years, that nothing but the highest praise can be given to those responsible for the improvement, notably the National Association of Audubon Societies. One wonders how long it will be before the islands will have returned to their natural state and conditions there will approximate those of the days before man upset the balance.

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