

supraloral stripe of orange, from base of bill to eye, including upper eyelid; a patch of orange below the eye, more intense on the right side than on the left, extending back over the upper part of the ear-coverts, and forward narrowly (on the left side only) to the rictus. Chin and part of the throat intense cadmium yellow. There is also a very appreciable tinge of this color on the yellow of the breast. The maxillary stripe is ash mixed with black. The streaks on the sides are nearly obsolete. "Length, 4.50; extent, 6.37; wing, 2.00; tail, 1.75" (collector's measurements from the fresh bird).*

Mr. Atkins says that at the time he took this bird he saw another which appeared to him to be identical with it, but a careful search later in the season has failed to bring to light any other specimens.

THE PRESENT CONDITION OF SOME OF THE BIRD ROOKERIES OF THE GULF COAST OF FLORIDA.

BY W. E. D. SCOTT.

First Paper.

ON Friday, April 30, 1886, I started from the town of Tarpon Springs in Hillsboro' County, Florida, to make a cruise of a few weeks along the west coast, to investigate matters ornithological. It was a journey without any objective point. I had in mind only to go as far south as possible, in the time at my disposal, passing over some ground that had been familiar to me six years before.

* [The specimen in question is remarkable for its small size, it being considerably smaller even than average West Indian examples of females of *D. discolor*; one (of several kindly loaned me by Mr. Ridgway for comparison), however, proves to be fully as small, while others are somewhat larger. In a large series from Florida in the Cambridge Museum of Comparative Zoölogy, with which I have compared Mr. Atkins's specimen, none are quite so small, but the ashy coloring of the maxillary stripe, the auriculars, and sides of the nape is met with in other specimens, and one or two show traces of the peculiar 'hyperchromatism' displayed by the specimen from Mr. Atkins. No single specimen, however, has all of these ashy markings combined, they being found separately in different specimens. The asymetry in respect to the heightened color on the two sides of the head suggests that the specimen in question is not only exceptionally small, but abnormal in coloration. The general effect is unique, and at first sight suggests probable specific distinctness from *D. discolor*.—J. A. A.]

The boat chartered for the trip was a small sloop of about five tons measurement, called the 'Tantalus.' I was accompanied only by the captain of the boat, and Mr. Dickinson, my assistant. The somewhat detailed account of this journey presented in the following pages is given in the form of a diary, having as its basis the notes registered in my log of each day's events.

April 30. Left Tarpon Springs at 10 A. M., and going out of the Anclote River, our boat was headed southward. As we passed out of the mouth of the river, the buoys, beacons, and stakes that mark the channel were made very conspicuous by the numbers of Florida Cormorants (*Phalacrocorax dilophus floridanus*) that were alighted on every part of the structures that afforded a roosting place. These birds have a 'rookery' or breeding and night roosting place on Lake Butler, about three miles inland from the mouth of the river, and every morning and evening are to be seen passing to and from the salt water of the Gulf, which is their principal fishing ground. They fly in flocks of from six to forty, and now and then a single bird or pair is to be seen passing over. At the rookery breeding fairly begins by the 10th of May, though a few birds may lay their eggs a little earlier. The birds are among the very few still found in Florida that are unsuspecting, being fairly tame and familiar, passing close over the tops of the cottages and houses making up the town of Tarpon Springs in their daily flights over the land between the fresh and salt water.

The two islands in the Gulf of Mexico, three miles off the mouth of the Anclote River, are known as the Anclote Keys, and are the headquarters of the fleet of Key West vessels employed in the sponge fishing. Six years ago the smaller of these two keys was a 'rookery,' both for breeding and roosting, for countless pairs of birds. There were literally thousands of them. The several acres of breeding ground are closely wooded with mangrove and other trees and bushes, and each tree or bush of any size contained several nests. There were also the several kinds of Herons to be found here (I have records of *Ardea herodias*, *A. egretta*, *A. candidissima*, *A. tricolor ruficollis*, *A. cærulea*, *A. virescens*, *Nycticorax nycticorax nævius*, and *N. violaceus* as all occurring and probably breeding on this island), Cormorants in great numbers, and Brown Pelicans (*Pelecanus fuscus*). Besides, during May and June, hundreds of pairs of Frigate

Birds (*Fregata aquila*) roosted here each night, though these, so far as I am aware, did not breed here. This was the state of affairs existing on the northern of the two Anclote Keys six years ago, according to my own observations, and those of Mr. Devereaux, who was then my assistant. This morning in passing these islands I saw but four Pelicans (they were flying by), two or three frightened Herons, and a few Gulls and Terns. It is safe to say that not a dozen pairs of Herons breed at present on the island, and that the other birds spoken of have all been driven away or killed. Once, at this time of the year, a perfect cloud of birds were to be seen hovering all day over the islands, so tame and unsuspecting that they had little or no fear of man; but now the place is almost deserted by birds and the few that are left have become, by being hunted, as wary as the traditional deer.

We sailed to-day as far as Little Clearwater Pass, where we anchored and spent part of the afternoon and night. On the way down to Clearwater Harbor we passed inside of Hog Island, situated to the east of it. Here another deserted heronry,—a small mangrove island, which, when I passed it in 1880, had many Herons breeding on it,—stood a silent witness of wanton destruction. At Little Clearwater Pass the birds noted were numbers of Royal Terns (*Sterna maxima*), Laughing Gulls and Black Skimmers, a few Brown Pelicans and Willets, and Wilson's Plover. We staid here all night.

Saturday, May 1. The wind, which was blowing hard till late yesterday, died out in the night, but at sunrise there was almost a gale from the northwest, and we did not get away until 12.30 P. M., John's Pass, fourteen miles below, being the point where we intended to harbor for the night. With a beam wind this place was soon reached, and at 3.30 P. M. the sloop was again at anchor in the little harbor inside of the Keys.

It was important to reach here early, as I particularly wished to observe a rookery which has been ever present in my mind since visits to the same point in April, 1880.

At that time I made two visits of a day and night each to this same rookery, and among the myriads of birds that were breeding and roosting, the particular abundance of the Roseate Spoonbill, the Reddish Egret, and all of the common Herons, as well as the White Ibis, will never be forgotten. It is enough to state without going into great detail, that in one flock at that time were at

least two hundred wonderfully colored Spoonbills, and that the numbers of the other species were many times greater.

The numerous islands inside of the outer keys at this point are mostly wooded with one or more of the several kinds of mangrove, and vary in area from one to several hundred acres. The two nearest the mouth of the pass are small; the larger one may have an area of seven and the smaller of not more than two acres. They formed the site of the rookery. Looking carefully over both I could see no birds when we anchored, but as the sun began to get low in the west, a few, possibly fifty in all, shy and suspicious Herons straggled in to roost on the smaller of the two Keys, and a flock of Fish Crows (*Corvus ossifragus*) were the only visitors at the larger. Most of the Herons were *A. ruficollis tricolor*, but there were several *A. egretta*, *A. candidissima*, and *A. cærulea*, and perhaps a dozen *A. rufa*, and three of the so-called *A. pealei*. No Spoonbills, not a single White Ibis—in fact an utter transformation from the happy and populous community of only a few years before.

Of other birds seen here my log only speaks of some Royal and Least Terns, a flock of Willets, and a single Kingfisher.

Sunday, May 2. We were up and away early, with a pleasant northeast wind, and instead of going out of the pass again our route threaded in and out among the inner islands, passing through Boya Sieya into Tampa Bay proper. In Boya Sieya is an enormous mangrove island, known throughout the region as the Maximo Rookery, and also intimately associated in my mind with the name of A. Lechvallier, a Frenchman, who, when I was last at this point, had his home in a little house on the mainland of Point Pinallas, about half a mile from this rookery.

Being anxious to get south as rapidly as possible I did not examine Maximo Rookery carefully, but passing it only half a mile away I could see no birds. On my return, however, I made an extended search through the hundreds of acres of mangrove, and will leave the subject till then. But it may be as well to state distinctly here that I am very credibly informed that during his several years' residence at this point, the old Frenchman and his gunners killed many thousands of the several species of birds there so abundant. These were particularly the several species of White Herons and countless numbers of the Brown Pelican.

Passing on we crossed Tampa Bay to the mouth of the Manatee

River, thence following the bay coast down to the mouth of Sarasota Bay, and that night at six anchored at the town of Sarasota. To-day we had sailed over some sixty miles, in a region once famous for its teeming bird life, but now the birds were only conspicuous by their scarcity. During the entire day I only noticed a few scattering Herons, one or two Man-o'-War Birds, four or five Brown Pelicans, and a few Gulls.

Monday, May 3. Left Sarasota at 6.25 A.M. Day clear; wind in morning east to northeast, moderate. We sailed out through Big Sarasota Pass and were soon in the Gulf, running down the coast with a fair wind. About five miles off shore were many Brown Pelicans fishing among great schools of mullet, and a few Man-o'-War Birds sailing about in graceful evolutions. Here, too, were some Laughing Gulls, and now and then a few Royal or Forster's Terns, in small flocks of may be a dozen individuals. This was about a fair sample of the bird life all the forty miles down to Boca Grande, the principal entrance to Charlotte Harbor.

Here we entered, and going, after getting fairly inside, about two miles to the northward along the shore of Gasparilla Island, at 5.25 P.M. we anchored for the night. We were not more than a hundred yards from the shore of the island and almost at once I went ashore in quest of birds.

The island is a long, low strip of sand, wooded with a heavy growth of cabbage palms and some kinds of low palmetto. Beside these were two kinds of mangrove growing profusely, as well as a perfect tangle of low undergrowth of shrubs and vines. All of the commoner small species that one would expect were represented, and I saw a single pair of Reddish Egrets, two White Ibises, and three Louisiana Herons. The bird that particularly attracted my attention was a single male Bobolink, in *full spring* plumage. This seemed to me unusual, but I have seen large numbers of the same species in early fall, about Tarpon Springs. They appeared on the 26th of August, 1886, at the point indicated. The first flock was small, not over twenty birds, but in a week they were abundant and in very large flocks. About the middle of October they began to disappear, and by November first all had left the region about Tarpon Springs.

Tuesday, May 4. Charlotte Harbor! How many wonderful tales of the great heronries, with the myriads of birds every-

where conspicuous, have been told of this region. Indeed, only a few years ago bird life was so abundant about the many islands dotting the harbor, that it would be difficult to exaggerate in regard to their numbers.

We were up early, for I had determined to explore every island and bay about the harbor, and knew that at least a week or ten days would be a short time for the work in hand. An *all day's* sail along the northern shore of the bay, passing mangrove islands which seemed to have been created for the home of many species of Heron, Ibis, and other water birds which once congregated here in vast numbers.

Captain Baker, who sailed the sloop, an old sponger and fisherman who had been familiar with all of this country for twenty-five years or more, pointed out to me among these islands four, at different points, where he assured me vast rookeries had existed. One of perhaps sixty acres he said he had seen so covered with 'White Curlew' that, to use his own words, "it looked from a distance as if a big white sheet had been thrown over the mangroves." And though we passed by, as I have said before, islands that plainly showed, by excrement still on the ground, that once countless numbers of birds had lived there, sailing probably over about forty miles in all, I did not see a rookery that was occupied even by a few birds, and I only saw a few stray Gulls, Pelicans, and two Herons in the whole day's cruise. About four o'clock, P.M., we reached a little settlement at the mouth of Pease Creek, called Hickory Bluff, and I went ashore to get what information I could regarding birds.

The postmaster and several other citizens with whom I talked all agreed that five or six years before birds had been plenty at the rookeries, and that it was no trouble to get hundreds of eggs to eat or to kill as many birds as one cared to. But that for the past two years birds had been so persecuted, to get their '*plumes*' for the Northern market, that they were practically exterminated, or at least driven away from all their old haunts. I further learned that all of the gunners and hunters in the country round had up to this year reaped a very considerable income from this source. Birds were killed, and the plumes taken from the back, head, and breast, and the carcass thrown to the Buzzards. Fort Myers, on the Caloosahatchie, was the central local market for this traffic, where several buyers were always ready to pay a high

cash price for all plumes and fancy feathers. The force of resident buyers was increased during the winter of each year by taxidermists (?), and buyers from the north, who came, in some cases at least, provided to equip hunters with breech-loaders, ammunition, and the most approved and latest devices for carrying on the warfare. One man, who had come down in this way for the past four years, was down south now, and regularly employed from forty to sixty gunners, furnishing them with all supplies and giving so much a plume or *flat skin*, for all the birds most desirable. The prices, I was told, ranged from twenty cents to two dollars and a half a skin, the average being about forty cents apiece.

All this I afterward fully corroborated, and met, personally, the gentleman in question, to whom I shall have occasion later to refer more at length.

We staid at Hickory Bluff all night, as I had determined to explore the Myiakka River, which, I had always heard, was a bird paradise, and I was told at Hickory Bluff that birds were still to be found there in large numbers.

Wednesday, May 5. Left Hickory Bluff early, but the wind being very light and ahead, we were till nearly night reaching a point about ten miles up the Myiakka River, which is near the head of navigation for boats drawing two feet of water. The rookeries described to us as being near the mouth of the river, and where I was told birds had abounded the season before, I found to be deserted; only here and there did I see anything of bird life, and in such cases only scattering individuals of the Florida Cormorant, White Ibis, and the commoner species of Herons. Along the bank of the river, where we camped in the late afternoon, were many Gray Kingbirds (*Tyrannus dominicensis*), the first I had seen on the cruise, and the first I had noted this season. Going up the river we sailed close to three Ducks which, as they rose out of the water, I determined were *Aythya marila nearctica*. Near where we anchored were a number of Sandhill Cranes (*Grus mexicana*) feeding and now and then uttering their peculiar cry. A few Brown Pelicans and a single Man-o'-War Bird complete the list of birds observed this day.

It may be well to remark that the river is still salt at the highest point we reached, and that it is said to be brackish forty miles from its mouth.

Tuesday, May 6. As I had been told at Hickory Bluff that the largest of the rookeries was still further up the river, we took the small boat serving as our tender, and early in the morning started to explore. About a mile and a half from where we had anchored, on passing a sharp bend in the river, we saw a small mangrove island fairly white with birds, most of which I presently discovered to be the small White Egret (*Ardea candidissima*), and with them a number of *Ardea ruficollis tricolor*, and a few *Ardea egretta* and *Ardea cœrulea*. The birds were in some cases still building, though some had finished their nests and had laid from one to three eggs. The *Ardea cœrulea*, of which there were perhaps half a dozen pairs, were mainly in the blue plumage, though I saw a number in the white and parti-colored phases, and a female in this last condition, taken later in the day, proved on dissection to be breeding, having a fully developed egg with hard shell in the oviduct.

Up to the present time, though I had been away on the trip for a week, not a single bird had been collected. So after dinner I went to the neighborhood of the rookery, where about two hundred birds in all were congregated, and in the course of the afternoon I took some twenty birds of the several kinds above enumerated, a pair or so of each. The rookery had evidently often been disturbed before, and the birds were very shy and only to be taken at long range, flying. The whole island was wooded with mangrove and was perhaps half an acre in extent.

Friday, May 7. Spent most of the morning in making the birds I had killed the afternoon before into skins, and later in the day explored the river further up for about four miles. This search was unrewarded, and so we came back to the sloop, determining to go out of the river and continue the exploration of Charlotte Harbor in the morning.

While anchored at this point I was visited by two plume hunters, each separately, who wished to dispose of numbers of plumes of Little White Egrets and other birds they had collected. They seemed much surprised to find that I did not wish to buy the material in question, and told me that I was the only *bird man* they had met who was not eager to obtain plumes. The name of one of these men I did not ascertain, but the other was Mr. Abe Wilkerson, of whom I shall have more to say later. The prices they asked for plumes of Herons were about as follows:

Ardea egretta, 40 cents (the only part of the bird used being the long feathers of the back); *Ardea candidissima*, 55 cents (in addition to the back plumes, those of the throat or breast and head are utilized); *Ardea rufa*, 40 cents (simply the back plumes); *Ardea ruficollis tricolor*, 10 to 15 cents (only the plumes of the back are utilized); *Ardea wardi* (plumes of breast and back), 75 cents to one dollar; *Ajaja ajaja* (*flat skin*) \$2.00 to \$5.00. A *flat skin* is the bird skin split underneath from the bill to the vent and skinned so that the whole is perfectly flat when dry. Generally the legs are cut off, and sometimes the wings, and even the head.

These two hunters both told me of the man of whom I had heard at Hickory Bluff, and gave me much interesting information regarding the traffic in plumes. Wilkerson told me of the birds which once inhabited the rookeries of this river in great abundance. He had made, he said, many a dollar from plumes obtained here, and spoke of the little rookery I have described above as too small to be hardly worthy of the name. He was on his way to some lakes far up the river, in the interior, where he hoped to find large rookeries of the Little White Egret, which is regarded as the best paying species. His method of obtaining birds was with a 22-calibre Winchester rifle. With this he could go into a rookery and secrete himself, and by using the lightest kind of cartridge get many more birds than with a shot-gun, as the report is hardly greater than the snapping of a branch, and is scarcely noticed by the birds. In this way he said he had been able in a large rookery down south to get over four hundred 'plume birds' in less than four days.

On asking him about Reddish Egrets, I found he was full of information. He told me of a rookery he had recently visited at the entrance of Matlacha Pass, where there were many of these birds, and some in the white phase. He also said he had hunted the entire coast, and that below Marko Pass, the colored phase of the Reddish Egret became uncommon, while the white phase began to be more numerous, and that the form found in the rookeries of the Thousand Islands was the white phase, which is there quite plenty; he had never seen a colored bird there or south of there. I have this same information from a number of independent sources and consider it reliable. A word further as to the range to the northward on the Gulf Coast of the Reddish

Egret (*A. rufa*). I have not met with it at all north of the mouth of the Anclote River, at which point it is rare. In all the rookeries about Tampa, Old Tampa, and Hillsboro' Bays, it is more or less common, but its representatives are almost entirely in the colored phase, and only now and then, at rare intervals, is a white bird (*A. pealei*) met with.

(To be continued.)

SUPPLEMENTARY NOTES ON THE GENUS ACANTHIS.

BY LEONHARD STEJNEGER.

THE well-known Austrian ornithologist, Victor, Ritter von Tschusi zu Schmidhoffen, has most courteously sent me four specimens of *Acanthis cabaret* from Austria, thus enabling me to supplement my former paper (*Auk*, 1887, p. 31) on the subject with a few notes.

I stated that from the examination of an Italian specimen I was "strongly inclined to think that it will be necessary ultimately to recognize *A. rufescens* (Vieill.) as different from *A. cabaret*." The Italian specimen, as compared with British birds, differed chiefly (1) in being of a brighter and more ochraceous brown; (2) in having whitish (not pale umber brown) outer margins to the tail-feathers; (3) in having the flanks more heavily streaked; (4) in having dusky streaks across the fore neck, and (5) in having a decidedly smaller bill.

The four Austrian birds show conclusively that the above characters will not hold as distinguishing continental specimens from British ones. They are practically identical with typical British *A. cabaret*, and can be matched completely, and I have British specimens of *A. cabaret* before me which are considerably brighter in general coloration, and have the flanks more heavily streaked than the Austrian examples, none of which exhibit any dusky streaks across the fore neck. Of the latter two have whitish outer margins to the tail-feathers, while in the other two they are brownish, and as to the size of the bill, the table below de-