

resident in the vicinity of Fort Custer, it probably breeds there as a straggler; I failed to meet with this species during the summer, but found it not at all uncommon during its fall migration. Specimens shot by me in the early part of October are now in the National Museum collection. I found them associated with White-crowned Sparrows and Arctic Towhees principally, scattered in small flocks through the undergrowth along the Big and Little Horn River bottoms, and it seems to confine itself to the shrubbery found along the streams. Specimens were shot by me as late as October 21, 1885.

A SUMMARY OF OBSERVATIONS ON THE BIRDS OF THE GULF COAST OF FLORIDA.

BY W. E. D. SCOTT.

(Continued from p. 18.)

Grus mexicana. SANDHILL CRANE. — This species is resident in the vicinity of the Gulf Coast of Florida at least as far north as Cedar Keys, and south of that place in suitable localities.

What is known locally as 'flat woods' is the particular kind of environment that the birds seem to like best. The characteristics of such regions are very low, level, barren lands, sparsely grown up with stunted pines and interspersed with open areas covered with coarse grass. The open areas are frequently covered by shallow ponds of water of greater or less extent. In the rainy seasons these ponds become of vast size, in fact the whole surface of the ground in the 'flat woods' is at such seasons flooded with water in depth varying from an inch or more to a foot. In such regions the Sandhill Cranes are to be found in small parties and in pairs the year round, and the drier portions are chosen for nesting and breeding. About Tarpon Springs the birds mate in January, build the last of that month or early in February, and the young are hatched about March 1. There are generally two young in a brood. Downy birds before me taken near Tarpon Springs, March 15, 1887, are from ten days to two weeks old.

Aramus giganteus. LIMPkin. — This species, like the last, though an abundant bird in some localities, is almost unknown in others. So far as I am aware it ranges as far north as Palatka and south into the Everglades. In Hillsboro' County I have never met with it, but in Pasco, Hernando,

and Sumpter Counties it is abundant and conspicuous in favorable areas. The breeding season of course varies very considerably according to locality, the more northern representatives breeding in April.

Where the birds occur and have not been greatly persecuted, they are very tame and unsuspecting, but in certain localities where they were once common they have been almost exterminated, being desirable for food. They were formerly abundant on the Ocklawaha and Withlacoochee Rivers and at Panasoffkee Lake, and at all of these points were resident. In the vicinity of the coast and salt water the birds are, so far as I am aware, unknown, and the nearest points where I have found them have been at least twenty miles in the interior.

Rallus elegans. KING RAIL.—This Rail does not seem to be of unusual occurrence in the vicinity of Tarpon Springs, frequenting the reedy swamps of the fresh water ponds and streams, where it seems to occupy a position corresponding to that of the form of *longirostris* in the salt marshes, though in not nearly so great numbers. I have several specimens from the upper waters of the Caloosahatchie River taken from November to January. On August 5, 1886, and again on the 10th of that month, I took young birds of the year in the first plumage. This was within a few miles of Tarpon Springs.

Rallus longirostris crepitans. CLAPPER RAIL.—The only typical specimens of this form that I have met with were a pair, mated and apparently breeding, that were taken by Mr. W. S. Dickinson at Anclote Keys, on May 19, 1887. These birds are now in my collection and are numbered 4128 and 4129 respectively. The only large Rail so far taken on the island of Key West by Mr. J. W. Atkins is a female of this species, secured on December 24, 1888. It is number 3207 in my bird catalogue. Mr. Atkins thinks that Rails of all kinds are uncommon on the island in question.

Rallus longirostris scottii. SCOTT'S RAIL.—This is by far the commonest species of Rail in the vicinity of Tarpon Springs, and in fact on the Gulf Coast from Cedar Keys south to Charlotte Harbor, and it breeds throughout this range at least and probably to the north and south of the points indicated.

They are confined, so far as I am aware, to the salt water marshes, and about Tarpon Springs are abundant the year around. They do not appear to be as retiring in their habits as are their congeners, and are frequently to be seen feeding at low tide on the exposed banks of mud and sand. At such times they are very tame and unsuspecting, and may be approached within a few feet. If alarmed, they run to the neighboring shelter of coarse grass of the salt water marsh, but presently return to feed, even though the intruder remains close at hand. Now and then one or two may be seen *swimming* some narrow arm of the bayou, and several times I have found pairs at least three or four hundred feet from shore, swimming about and apparently feeding on some small fish or crustacea.

They begin to mate in February, and the breeding season is at its height by the first of April. The nesting habits do not materially differ from

those of the other forms of salt water Rails that I am acquainted with, and the number of young in a brood is about the same as with *crepitans*. It is probable that two broods are raised, or it may be that individuals differ as to breeding time, as I have found downy young from early in May till about the first week in July. During the mating season the male birds are very pugnacious and resent any intrusion from others of the species. At such times I have seen them have pitched battles, and finally, one giving in and taking to flight, the victor would pursue the vanquished on the wing for several hundred feet and then return to the neighborhood of the particular tuft of grass that sheltered the nest. At such times, on alighting, the peculiar rattling notes so characteristic of the bird are indulged in with more than ordinary vigor.

ON INDIVIDUAL COLOR VARIATION IN *Rallus longirostris scottii*.— For the purpose of making the comparisons which follow more intelligible to such of my co-workers as have not seen this form, the description of an average specimen of this new race is here appended.

Adult ♂, Collection of W. E. D. Scott, No. 5047. Tarpon Springs, Florida, December 27, 1887. Above deep olive brown, the feathers of the interscapular region edged broadly with a lighter shade of drab, more or less suffused with olive. This edging of the feathers is also present to a less degree on the upper posterior half of the neck. From here forward the color, deep olive brown, is immaculate, gradually shading into drab on the sides of head and face. Area in front of eye dark olive-brown shading gradually into the drab of the sides of face. A more or less distinct line of a lighter shade of olive brown, or often cinnamon, extends from the upper mandible to the area above the eye. Beneath, breast and neck ashy olive with a very perceptible cinnamon tinge, becoming whitish on upper throat and chin. Sides, flanks, and axillars deep olive-brown barred with white. Lower tail-coverts white with scattered olive-brown markings.

The following notes on the individual variation in color are based on a series of fifty adult birds taken at all seasons of the year and about equally divided as to sex. Above the variation is not great though the width of the edging on the feathers of the interscapular region and of the larger wing-coverts varies, being widest and most pronounced in the lighter colored birds. The tendency of the darker individuals is to have these markings suffused with dark olive brown. The superciliary line and lighter areas of the head also are often obscured by a similar shade of color in the darker birds.

Beneath and on the flanks and sides the variation is much more marked. Twelve of the fifty birds have tawny yellow, and in three cases decidedly bright cinnamon, breasts. But in all of these there is a varying suffusion of olive in the region where the neck and breast join. The neck proper is of about the same shade as the breast, though there is a tendency of the cinnamon shade to become lighter and finally to change insensibly to white on the throat and chin. Six of the fifty birds are clear dark olive beneath, becoming very little lighter on the throat, and lacking any tinge or suggestion of the cinnamon shade. The amount of whitish

barring on the sides, flanks, and axillars, varies greatly and seems to correspond to the general tone of the color of the individual. The birds with cinnamon or yellowish breasts have clearly defined whitish bars, generally rather more than an eighth of an inch in width. The birds with clear olive below, have their barring often obscure and in three individuals examined the bars are almost obsolete on the flanks and sides, and not present at all on the axillars. The amount of white on the lower tail-coverts is at a minimum in these darker birds and often assumes the form of bars, *narrower* than the dark olive brown areas between. These are some of the more noticeable features in the color variation in the series of birds considered, and the remaining individuals not before alluded to present every degree of intermediate phase of color. There does not seem to be any correlation, in this tendency to vary in color, to the age or sex of the individual, or to the season of the year, for I have birds taken in winter that are of both extremes, and breeding birds that present every degree from the dark to what may be termed the lighter phase of color. The young birds in first plumage are generally lighter as a whole than the adults, and the under parts that are olive or cinnamon in adult birds are dirty whitish at this stage in the dozen or more individuals that have come under my observation.

Rallus virginianus. VIRGINIA RAIL.—This does not seem a common species on the Gulf Coast, and my records about Tarpon Springs are but few, being made in the months of December, 1887, and February, 1888.

Porzana carolina. SORA.—Though more common than the last, I have but few records of this species from Tarpon Springs, the earliest fall note being in the first week in October and the latest spring note March 29, 1887. Mr. Atkins finds the species not common at Key West "in the fall."

Ionornis martinica. PURPLE GALLINULE.—About Tarpon Springs this species is not common but I have records of its occurrence in this vicinity. At points on the Coloosahatchie River it is common, resident, and breeds. A nest and four eggs from this region are before me, and were taken on May 10, 1887. I have also a series of birds collected in the same locality from the downy stage to the peculiar first plumage, which seems to be assumed, at the point in question, about the first week in July, and only lasts about six weeks to two months, when the second moult is completed.

This is one of the species that in its migrations is frequently blown out to sea in the Gulf and I have had several individuals brought to me by men from the sponging boats that fish from six to fifteen miles off the mouth of the Anclote River. These birds came on board during hard storms, generally in March, and being very much exhausted were easily captured.

Gallinula galeata. FLORIDA GALLINULE.—Common resident, and breeds in suitable localities, at all points which I have visited on the Gulf Coast of Florida. The birds are, however, apparently much more abundant in winter than during the warmer months.

Fulica americana. AMERICAN COOT.—A common species, being abundant in winter, and congregating at times in the larger fresh water lakes in enormous flocks.

Himantopus mexicanus. BLACK-NECKED STILT.—The only notes I have of this species are two records of its capture by Mr. J. W. Atkins. Both birds were taken by him on Sanibel Island in 1886, one on March 26 and the other on May 2. Mr. Atkins has not observed the species at Key West.

Philohela minor. AMERICAN WOODCOCK.—The only note of the occurrence of the Woodcock that I have from this region is one observed at Panasoffkee Lake early in January, 1876.

Gallinago delicata. WILSON'S SNIFE.—A common winter resident at suitable localities throughout Florida. I have observed it in the neighborhood of Tarpon Springs as late as March 15. Mr. Atkins finds it wintering sparingly on the Island of Key West.

Macrorhamphus griseus. DOWITCHER.—A common winter resident, and abundant spring and fall migrant, on the Gulf Coast of Florida. I have notes of the occurrence of this species in the vicinity of Tarpon Springs every month during the year. The birds that remain during the summer are about equally divided as to plumage, some being in the gray, and some in the reddish brown plumage. Though not common, they are not at all rare during the months of June, July, and August, and are generally to be found in flocks of three to ten individuals. Those that I have taken during these months are equally divided as to sex, and on examination by dissection show no signs of breeding, but on the other hand do not appear to be either crippled or barren birds.

Mr. Atkins finds them at Key West, and on June 11 and 14, 1888, noted them as being common. He killed several on these days in gray plumage, and remarks that the "ovaries and testes showed no enlargement."

Macrorhamphus scolopaceus. LONG-BILLED DOWITCHER.—Of rather common occurrence near Tarpon Springs in the fall and early winter months, and I have also obtained specimens taken near Fort Meyers, on the Caloosahatchie River, in December.

Micropalama himantopus. STILT SANDPIPER.—Not observed in the vicinity of Tarpon Springs or at other points that I have visited, but I am indebted to Mr. J. W. Atkins for the record of the capture of one, a male, at Key West on November 1, 1888.

Tringa canutus. KNOT.—A common migrant, and a few winter, in the vicinity of Tarpon Springs. During the month of May they are abundant, going north, in flocks of from four or five to fifty. I noted them as common at Gasparilla on May 24-26 and 28, 1886, and on June 2 at John's Pass. I observed several small flocks. Almost without exception they were in full plumage.

Tringa maritima. PURPLE SANDPIPER.—The only record for Florida that I am aware of, is the specimen, No. 5070, in my collection, kindly presented to me by Mr. Atkins of Key West. (See Auk, Vol. V, p. 184). There is a mistake as to the capture of the bird as then recorded. It was

taken by Mr. Thomas Hart of Marco, at Gordon's Pass, Florida, November, 1, 1886. The bird in question is a female.

Tringa maculata. PECTORAL SANDPIPER.—The only records I have of this species have been kindly furnished me by Mr. J. W. Atkins of Key West. "Punta Rassa, Florida, taken on September 1, 1887." "Key West, Florida, seen, July 26, 1888." "They were not common at either place."

Tringa fuscicollis. WHITE-RUMPED SANDPIPER.—I have records of this species from the vicinity of Tarpon Springs in May and June but it does not seem common. Mr. J. W. Atkins took a female on June 11, 1888, at Key West, that was "emerging from winter plumage."

Tringa minutilla. LEAST SANDPIPER.—A common migrant and winter resident, and some remain during the summer on the Gulf Coast, as I have records of the species observed during June, July, and August of 1886. Mr. Atkins says in a recent letter to me "Peeps of this kind or the Semipalmated, seen at Key West on June 11, 1888. Again on July 28, and were common on August 20, 1888."

Tringa alpina pacifica. RED-BACKED SANDPIPER.—A common migrant and winter resident in the vicinity of Tarpon Springs. A few remain during the summer but not as commonly as *Macroramphus griseus*. I noted them as late as June 2, 1886, at John's Pass, migrating north in small flocks. Most of them had almost assumed full plumage. The height of the migration seems to be in the latter part of April and first week of May. Mr. Atkins has not observed this species at Key West.

Ereunetes pusillus. SEMIPALMATED SANDPIPER.—A common migrant and abundant winter resident. The same remarks that apply to *Tringa minutilla* as a summer resident species, hold good in regard to the bird in question. Mr. Atkins has also observed it in Key West in June, July, and August.

Ereunetes occidentalis. WESTERN SANDPIPER.—Not nearly so abundant as *Ereunetes pusillus*, but of regular occurrence in fall and winter on the Gulf Coast of Florida in the vicinity of Tarpon Springs.

Calidris arenaria. SANDERLING.—A rather common migrant, and a few winter. At Gasparilla Pass I observed the species migrating north in small flocks, of which some birds were still in immature plumage, as late as May 24, 1886. Mr. Atkins says he found it to be rare at Punta Rassa and he has only met with it once at Key West in the fall.

Limosa fedoa. MARBLED GODWIT.—The Marbled Godwit, though not an abundant species, is to be found on the Gulf Coast of Florida the year round, and probably breeds though I have no positive records. In winter the number of these birds is considerably augmented, and flocks of six to twenty and even more are frequently seen. Mr. Atkins found it at Punta Rassa rather commonly from April to August, 1886, but has no records of its occurrence at Key West.

Totanus melanoleucus. GREATER YELLOW-LEGS.—A rather uncommon migrant and winter resident in the vicinity of Tarpon Springs. Mr. Atkins says of it: "Not uncommon at Punta Rassa in winter and spring."

"Found at Key West on June 11, 1888 (one bird)." Common at Key West, August 20, 1888.

Totanus flavipes. YELLOW-LEGS. — A rather rare migrant about Tarpon Springs, and I have no winter records of it at that point. Mr. Atkins did not meet with the species at Punta Rassa, but at Key West, he saw one bird on July 16, several on the 20th of the same month, and on July 28 they were common. All these notes were made during the season of 1888.

Totanus solitarius. SOLITARY SANDPIPER. — A common spring and fall migrant about Tarpon Springs, appearing most commonly in September, March, and April. "Common at Key West, July 28, 1888."—J. W. Atkins.

Symphemia semipalmata. WILLET. — Common resident. Breeds in great numbers on Old Tampa Bay and at other points visited. The breeding season is at its height in the vicinity of Tarpon Springs by April 20. Mr. Atkins says that it is resident and breeds at Punta Rassa and that he finds it at Key West in the fall.

Symphemia semipalmata inornata. WESTERN WILLET.—In my former paper, noticing this subspecies (see Auk, Vol. V, p. 185), I thought that this was the commoner of the two forms of Willet in the winter months. I am now inclined to believe it much rarer than the *semipalmata* in winter and of only casual occurrence during the summer months, and do not believe that this form breeds on the Gulf Coast of Florida.

Bartramia longicauda. BARTRAMIAN SANDPIPER.—Mr. Atkins writes me that on October 3, 1888, he secured a female at Key West, which is the only time he has met with the species. I have no notes in regard to it.

Actitis macularia. SPOTTED SANDPIPER. —A common migrant about Tarpon Springs, appearing in late March and April abundantly, and again in September. The vicinity of mangrove islands appears a favorite resort for the species, where at low tide they may be seen feeding among the twisted net-work of roots, and as the tide rises they retire to some dead branch or limb where small companies of from four to ten may be frequently found *perched*, awaiting the ebb to resume their interrupted search for food.

Mr. Atkins found the species at both Punta Rassa and Key West all winter, and has notes from the latter place on July 28, 1888, when they were common. This indicates their breeding in the vicinity, though I know of no actual record.

Numenius longirostris. LONG-BILLED CURLEW. — Resident on the coast in the vicinity of Tarpon Springs, and doubtless breeds, though sparingly.

Mr. Atkins observed it at Punta Rassa throughout the year, and believes it breeds there. He has not met with it at Key West.

Charadrius squatarola. BLACK-BELLIED PLOVER.—A common migrant on the Gulf Coast, and some remain all winter, and a few throughout the summer months, at all the points I have visited or from which reliable notes have been obtained.

Flocks of varying size were observed by me in Charlotte Harbor during the month of May, 1886, and as late as the 28th of that month. These were all apparently migrating north and many of the birds were in almost full plumage.

Mr. W. S. Dickinson took an adult male at the mouth of the Anclote River on August 30, 1888, that was in almost full breeding plumage.

Mr. J. W. Atkins has kindly sent me records of a pair that remained at Key West during the entire summer of 1886, and were joined by a few others, presumably from the north, on August 8 of that year. He says further: "At Key West during 1888 on June 11 and 14 six or eight were noted each day in company with breeding Wilson's Plovers. They were seen again at Key West on July 26, and regularly after that date."

Charadrius dominicus. AMERICAN GOLDEN PLOVER.—The only record of this species is from Punta Rassa where, though not at all common, it was taken by Mr. Atkins.

Ægialitis vocifera. KILLDEER.—A rather common resident about Tarpon Springs, but more frequent in winter. A few breed. Mr. Atkins found it not common at Punta Rassa, but an abundant winter resident at Key West.

Ægialitis semipalmata. SEMIPALMATED PLOVER.—A common migrant and winter resident at points on the Gulf coast; not observed in summer. Mr. Atkins's notes from Punta Rassa and Key West are of similar import.

Ægialitis meloda. PIPING PLOVER.—Not as frequent as the last, but noted at the several points visited by me, and also by Mr. Atkins at Punta Rassa. It is apparently rare at Key West. I have no notes of its occurrence during the summer months, nor has Mr. Atkins observed it at that season.

Ægialitis wilsonia. WILSON'S PLOVER.—An abundant spring and fall migrant and summer resident in the vicinity of Tarpon Springs where it breeds very commonly. At this point and on Tampa Bay I have yet to meet with the bird in December and January, and do not think it occurs. It arrives here late in February and in March, and breeding begins in April and continues till late in July.

Mr. Atkins found it resident and breeding at Punta Rassa, but has only met with it at Key West in summer, where it does not seem as abundant as on the mainland. He secured eggs of the species at Key West on June 11 and 14, 1888.

Arenaria interpres. TURNSTONE.—A rather common migrant in the vicinity of Tarpon Springs. Observed as late as June 2, 1886, in the vicinity of John's Pass in small flocks apparently migrating north. I also found them common at all points in Charlotte Harbor in May of the same year.

Mr. Atkins says it is a common winter resident and late spring migrant at Punta Rassa. On August 2 and 12, 1886, he took Turnstones in almost full plumage at that point. On June 11 and 14, 1888, he found and secured a few of these birds at Key West. Of one taken on the latter date he remarks that "on dissecting the bird no signs of the approach of breeding were to be noticed."

Hæmatopus palliatus. AMERICAN OYSTER-CATCHER.—The only points on the Gulf coast where I have seen this species are Old Tampa Bay and the outer keys at Charlotte Harbor. At the latter point they were abundant in May, 1886, and were then mated and undoubtedly breeding. Mr. Atkins observed them rarely at Punta Rassa, and has not seen them at Key West.

(To be continued.)

RECORDS OF RARE BIRDS AT KEY WEST, FLORIDA, AND VICINITY, WITH A NOTE ON THE CAPTURE OF A DOVE (*GEO-TRYGON MONTANA*) NEW TO NORTH AMERICA.

BY W. E. D. SCOTT.

Stercorarius parasiticus. PARASITIC JAEGER.—A single young bird of the year was secured by Mr. Hart at Marco, Florida, in the winter of 1884 and kindly sent to me for inspection by Mr. Atkins.

Anas cyanoptera. CINNAMON TEAL. — Under date of November 12, 1888, Mr. J. W. Atkins of Key West writes me: "Did I give you the record of a Cinnamon Teal taken here on November 1, 1887? I have the skin in my collection, and on October 24 (this year) I examined another of the species in the possession of a boy, who had just shot it in a pond near the town [Key West]."

Melopelia leucoptera. WHITE-WINGED DOVE. — Mr. J. W. Atkins secured a specimen of this species at Key West on November 14, 1888. He kindly sent it to me, and not being certain as to its identity, it being moulting, I forwarded it to Mr. J. A. Allen who compared and fully identified it. The bird is a male. Mr. Atkins writes me: "The bird was shot by a young man on this island and purchased of him by me. He reports that a flock of three of this kind of bird had been seen in the locality where the one in question was secured, the day before the capture." This being the first Florida record of the species, is of especial interest.

Geotrygon montana. RUDDY QUAIL-DOVE. — Mr. Atkins writes me on December 10, 1888: "I will send you shortly the head of a Key West Quail-dove (*Geotrygon martinica*). The Dove was shot here (Key West) by a boy on December 8, 1888, and was brought by him to the telegraph office to show me. Unfortunately I was absent. When I returned, one of the office boys told me of the "red dove." Going in search I found the Dove had been sold with some Carolina Doves to a man near by. I arrived at his place to find that it had been picked with the others, and only suc-