

In size the bird is very near *Botaurus exilis*, perhaps a trifle smaller than the average of that species.

The following measurements are all taken from the dry skin before me. Length, 11.50 inches; wing, 4.60; culmen, 2.00; tarsus, 1.60.

From the meagre biographical notes that Mr. Menge was able to make, it would appear that the habits of *Botaurus neoxenus* are very like those of *B. exilis*.

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

BY W. E. D. SCOTT.

(Continued from p. 252.)

Milvulus forficatus. SCISSOR-TAILED FLYCATCHER.—For notes on this species see Auk, Vol. VI, No. 2, April, 1889, p. 161. Mr. Atkins writes me that he has examined a single bird of this kind, taken at Miami by A. Lechevallier, but with no sex or date on the label.

Tyrannus tyrannus. KINGBIRD.—A common migrant and a few remain to breed. Not recorded during the winter months. The species arrives about Tarpon early in April (1-10) and the latest fall notes recorded are in the first week of October.

Mr. Atkins says, "Arrives at Punta Rassa going north the latter part of March. Occasionally found there until April 26. Young male birds taken August 20. Key West, first arrival noted March 20, last seen April 12. August 30 reappeared at Key West in large flocks, and was more or less common until October 15, after which the birds were not seen.

Tyrannus dominicensis. GRAY KINGBIRD.—An abundant migrant, and breeds in great numbers on the keys off the coast, affecting particularly such as are covered with mangrove. The earliest record I have of its arrival about Tarpon Springs is April 23, 1887, and the birds are common till late in September. The eggs are laid in this vicinity from about the middle to the last of May, and but one brood appears to be reared.

Mr. Atkins's notes are as follows: "Arrives at Punta Rassa middle of April; nests commonly on the islands and along the shore in mangrove bushes. Seems to prefer an isolated tree or bush near the water. Last noted at Punta Rassa September 13. Arrives at Key West about April 11. A few breed here. The main body returns with *Tyrannus tyrannus* and passes southward with that species."

Myiarchus crinitus. CRESTED FLYCATCHER.—Common migrant and rather rare summer resident. In the region about Tarpon the arrival in spring is about April 10, and during that month the birds are abundant. From the same locality I have also notes of the occurrence of the species in September. The birds that remain during the summer average deeper in coloring than northern examples at the same season of the year. Mr. Atkins says, "They are common at Punta Rassa in winter. One individual seen on August 25. Key West, January 24, 1889, one taken, the only record I have made here."

Sayornis phœbe. PHŒBE.—A migrant and winter resident. Abundant. "Common at Punta Rassa and Key West during the migrations and occasional in winter at both places."—J. W. Atkins.

Contopus virens. WOOD PEWEE.—A rather common migrant and rare summer resident, breeding sparingly about Tarpon Springs. Mr. Atkins says: "I have but one record at Punta Rassa, November 23, 1885."

Empidonax acadicus. ACADIAN FLYCATCHER.—A rare migrant. This is the only species of the genus *Empidonax* that I have met with in the vicinity of Tarpon Springs.

"One record at Punta Rassa September 13, 1886. No records at Key West."—J. W. Atkins.

Cyanocitta cristata florincola. FLORIDA BLUE JAY.—Abundant resident. This is particularly true of the neighborhood of Tarpon Springs. Breeds in this vicinity in April and May. Mr. Atkins did not find the species at Punta Rassa, but obtained it in the vicinity. He has been unable to detect the presence of the Florida Blue Jay at Key West or in the neighboring islands.

Aphelocoma floridana. FLORIDA JAY.—Common resident in suitable localities in all the country of the Gulf Coast north of Punta Rassa. Mr. Atkins has not found this species either at Punta Rassa or at Key West, or in the vicinity of either of these places.

Corvus americanus floridanus. FLORIDA CROW.—Common resident. Breeds about Tarpon Springs in April and May. At Punta Rassa Mr. Atkins records the species as very common and breeding in numbers. He has observed it more rarely at Key West, where it is unusual to meet with more than a pair at one time, and at which point he has not recorded the species as breeding.

Corvus ossifragus. FISH CROW.—Common resident at many points on the Gulf Coast and probably breeds, for though I have not found the nest, I have records of its occurrence in numbers as far south as Punta Rassa for every month in the year. In the fall these birds congregate in enormous flocks, and in October the berry of the palmetto is their favorite food.

Dolichonyx oryzivorus. BOBOLINK.—Common spring and fall migrant about Tarpon Springs, but absent in the summer and winter. In the spring they appear late in April and remain perhaps two weeks. At this time the male birds have assumed full plumage. Also see Auk for Vol. IV, p. 139. In the fall they arrive in large flocks about Tarpon Springs as early

as August 26, and are abundant through the month of September. Mr. Atkins found them common in fall at Punta Rassa, but very rare in spring at that point. But at Key West he says "they are abundant both as fall and spring migrants."

Molothrus ater. COWBIRD.—A not very common bird in the winter months about Tarpon Springs. While here the birds are most frequently associated with *Agelaius phoeniceus* and *Quiscalus quiscula aglaeus*. Found throughout the year commonly at Punta Rassa by Mr. Atkins, but not at Key West during the summer, though common during the remainder of the year.

Agelaius phoeniceus bryanti. BAHAMAN RED-WINGED BLACKBIRD.—The Red-winged Blackbirds collected by me in the vicinity of Tarpon Springs and further south appeared to be referable to this subspecies, and not having access to material for comparison I sent the series to Mr. J. A. Allen at New York who kindly examined them for me and has given his view in a letter, as follows: "The Red-wings I should refer on general grounds to *A. phoeniceus bryanti*, as I think this name may be used for resident South Florida birds, from at least Indian River southward, although the bill is less attenuated and less laterally compressed at the base than in our single Nassau specimen."

"At Punta Rassa the Redwings are common residents and breed, being more abundant in summer than in winter. At Key West I have not noted them in such large numbers though they are to be found the year round."—J. W. Atkins.

Sturnella magna mexicana. MEXICAN MEADOWLARK.—Common resident. Breeds in April and May about Tarpon. I cannot but agree with Mr. Chapman (see Auk, Vol. V, p. 273) as to the affinity of the form of the Meadowlark that occurs in this part of Florida. The peculiar suffused plumage assumed by the Meadowlarks in the fall in New Jersey, and which is worn throughout the winter months, is much more transitory here, and birds before me taken in December do not show it.

Since I wrote the foregoing Mr. Allen and Mr. Chapman have kindly examined a large series of Meadowlarks sent them by me and confirm the identity of the Florida representatives with *S. magna mexicana*. Referring to the matter Mr. Allen says: "He [Mr. Chapman] has had all of the Smithsonian material in hand, which with ours gives a considerable series of true *mexicana* and a very large series of Florida specimens. They furnish no characteristics by which they can be separated." I am indebted to both Mr. Allen and Mr. Chapman for their kindness in making these comparisons for me.

Mr. Atkins found this species at Punta Rassa in November, 1885, but regards it as uncommon at that point and has not met with the birds at Key West.

Icterus spurius. ORCHARD ORIOLE. A rather common migrant in the spring about Tarpon Springs. (See Auk, Vol. V, p. 186.) Mr. Atkins did not obtain this Oriole at Punta Rassa but on April 29, 1887, he took a young male, *i. e.*, in the yellow plumage with black throat, at Key West. This is the only time he has observed the species at that point.

Quiscalus quiscula aglæus. FLORIDA GRACKLE. — Abundant resident and breeds in numbers in May in the region about Tarpon. I do not think that more than a single brood is reared each season.

“Not common at Punta Rassa but very abundant on the upper waters of the Caloosahatchie. Very common at Key West, where it breeds, arriving in large numbers about the middle of April.”—J. W. Atkins.

Quiscalus major. BOAT-TAILED GRACKLE. — Common resident, and breeds in numbers, the season varying somewhat with the locality. At Tarpon the breeding season lasts from April to July and two broods of from three to five chicks are reared.

“Common at Punta Rassa, but only a few stragglers observed at Key West, these seen in September and October.”—J. W. Atkins.

Spinus tristis. AMERICAN GOLDFINCH. — Not very common, but of regular occurrence as a winter visitor, during the several seasons I have spent at Tarpon Springs. The earliest record of appearance is December 30, 1877, and the birds then remained in small flocks. Occasionally seen till February 20. The only bird observed at a later date than that was a male taken on April 12, 1888, that had almost assumed full plumage. Mr. Atkins observed the birds in small numbers at Punta Rassa early in January, 1886. He says “the weather had been very cold there for some days previous to their arrival, ice forming in vessels containing water.” Mr. Atkins has not observed the species at Key West.

Pooecetes gramineus. VESPER SPARROW. — Rather common. Late fall and early spring migrant about Tarpon Springs, and a few winter in the vicinity. Mr. Atkins did not take the species at Punta Rassa and has only met with it on one occasion at Key West, when a single one was taken on January 29, 1888.

Ammodramus sandwichensis savanna. SAVANNA SPARROW. — A common migrant and winter resident in the neighborhood of Tarpon Springs. In the fall they arrive about October 14 and remain till April, though not common after March 1. Many winter both at Punta Rassa and at Key West, Mr. Atkins writes me.

Mr. Allen has kindly examined a large series taken at Tarpon Springs and other points, and writes me in regard to them as follows: “Of your series of fifty-two *Ammodramus sandwichensis savanna*, thirty-nine are October specimens and do not differ from northern birds taken at the same season. The darkest of them is exactly matched by birds from Englewood, New Jersey. The winter specimens (one taken in January, ten in February, one in March, and one in April) agree with northern spring specimens, except two which are blacker above and more heavily streaked below than any in our (rather small) series of northern birds. These are Nos. 4966, ♂, Tarpon Springs, February 28, 1888, and 5452, Key West, January 28, 1887. The next darkest specimens in your series are readily matched with northern birds and with the two exceptions named there is nothing peculiar in your series. The two very dark specimens I should consider as probably only cases of extreme individual variation.”

Ammodramus savannarum passerinus. GRASSHOPPER SPARROW. —

A rather common migrant and winter resident about Tarpon Springs, where the birds arrive early in October, and remain till March 20 in numbers, and till April 6-to rarely. The same remarks apply to both Punta Rassa and Key West, according to Mr. Atkins.

Ammodramus henslowii. HENSLOW'S SPARROW. — Rather rare migrant and winter resident at points near Tarpon Springs, and I have taken the species as late as April 11 at this point. Mr. Atkins did not detect the species at Punta Rassa, nor has he found it at Key West.

Ammodramus caudacutus. SHARP-TAILED FINCH.—A rather common migrant and winter resident about Tarpon Springs, and in suitable localities which I have visited both north and south of the Anclote River.

Mr. Allen in writing of some examples of this species which I sent to him from this point last year (see *Auk*, Vol. V. p. 284) spoke of slight differences which did not seem to warrant subspecific separation. In a recent letter, of additions to that material he writes me: "The eleven *Ammodramus caudacutus* agree exactly with those you sent last year. With this larger series, and also a larger series of northern birds for comparison, I still believe the differences too slight, and inconstant to warrant the separation of the Florida birds as a local or southern race of *A. caudacutus*, as quite a proportion of the southern birds are easily matched with Long Island and New Jersey specimens."

I am not aware that this species breeds on the Gulf Coast of Florida nor that it extends its migration much to the south of the mouth of the Anclote River. Mr. Atkins did not find it during the several seasons he collected at Punta Rassa, nor has that gentleman detected it in the vicinity of Key West.

Ammodramus peninsulæ. SCOTT'S SEASIDE SPARROW.—During the past winter this bird was found to be very common in the salt water marshes both to the north and south of the Anclote River. I have collected in the months of December, January, and February of the winter of 1888-89 a series of sixty-seven of these birds. In the light of this new material I am inclined to regard this form as a *species* rather than as a *subspecies* of *Ammodramus maritimus*, and therefore propose this new rank for the bird in question. In this entire series there are no individuals that could not at a glance be selected from the true *maritimus*. The bird seems quite as distinct from that species as from *Ammodramus nigrescens*, and of equal value as a species to either of these two near allies.

The species does not, as far as I am aware, breed in the vicinity of the point where I found it wintering so abundantly, and I am inclined to believe that its migrations are not extended far to the south of the mouth of the Anclote River. During the winter of 1879-80, which I spent partly at the mouth of the Withlacoochee River and partly at Clear Water Harbor, I found the birds quite common at the former place, but though I looked for them carefully I did not detect them at any point in the salt marshes of Clear Water Harbor. Mr. Atkins has been unable to find the species at Key West, and did not meet with it at Punta Rassa.

Chondestes grammacus. LARK SPARROW.—The two records of this

bird for the Gulf Coast already published in this journal are of an adult female taken by Mr. J. W. Atkins at Punta Rassa, September 26, 1886, and an individual seen by the writer on September 19, 1886, at Tarpon Springs. In addition Mr. Atkins secured one at Key West on October 6, 1887, and on the 10th of November, 1887, I saw one at Tarpon Springs, and watched it for some ten minutes or more. In the light of these several observations it seems probable that the bird is a regular though rare migrant on the Gulf coast of Florida.

Spizella socialis. CHIPPING SPARROW.—A not very common winter visitor in the vicinity of Tarpon Springs. Mr. Atkins has no notes on this or the next species from either of the points to the south where he has collected.

Spizella pusilla. FIELD SPARROW.—Not so common as the last, but of regular occurrence in the vicinity of Tarpon Springs in December and January.

Peucæa æstivalis. PINE-WOODS SPARROW.—A not very common resident in the immediate vicinity of Tarpon Springs, but common at many places on the Pinellas peninsula just to the south. They breed wherever they occur in this region. Mr. Atkins has not met with the species at either point where his investigations have been carried on.

Peucæa æstivalis bachmanii. BACHMAN'S SPARROW.—I had formerly considered that this subspecies probably bred in the vicinity of Tarpon Springs, but have come to regard it as a rare migrant and winter visitor, perhaps more common in late fall than at any other season. The earliest record I have is September 27, and the latest spring record is in February. Mr. Atkins has not met with it at Punta Rassa or Key West.

I sent to Mr. J. A. Allen the series of this and of *P. æstivalis* for examination and comparison, and after kindly looking them over he writes: "The twelve *Peucæas* taken in April and May are all typical *P. æstivalis*. Only seven of the series of fifty are *P. æstivalis bachmanii*; five of these are October specimens; one is dated September 27, and the other was taken in February. They are all probably migrants from the north. Of the thirty-six other September and October specimens I should consider one fourth of them as intermediates of various grades between *P. æstivalis* and *P. æstivalis bachmanii*."

Melospiza fasciata. SONG SPARROW.—A not very common but regular winter visitor about Tarpon Springs. Mr. Atkins did not notice it at Punta Rassa, nor has he observed it at Key West.

Melospiza georgiana. SWAMP SPARROW.—An abundant winter resident and common migrant in the vicinity of Tarpon Springs. Mr. Atkins took this species at Punta Rassa in winter on several occasions, but considered it uncommon. He has not observed it at Key West.

Passerella iliaca. FOX SPARROW.—Mr. Atkins took a single representative of this species at Punta Rassa in November, 1886. This is the only occurrence that I have record of.

Pipilo erythrophthalmus alleni. WHITE-EYED TOWHEE.—Common resident and breeds in numbers about Tarpon Springs in early April and

later. Mr. Atkins found it common at Punta Rassa in winter, and regarded it as rare in the breeding season at that point. The only record from Key West is of a single bird blown ashore in a heavy northwest gale in February, 1889. The bird was in an exhausted condition so that it was caught and caged.

Cardinalis cardinalis. CARDINAL.—Common resident, and breeds at all points visited on the Gulf Coast. At Key West, Mr. Atkins says: "It is rather rare, but few birds having been noted. But it is common on the keys north of here. The Cardinal is in great demand as a pet by the Cubans, and on that account is a regular feature of the auction rooms, being supplied from the northern keys and the mainland."

Habia ludoviciana. ROSE-BREADED GROSBREAK.—I have not met with this species on the Gulf Coast where it seems to be a rare migrant. Mr. Atkins took three individuals at Key West on October 11, 1888. He did not meet with the species at Punta Rassa.

Guiraca cærulea. BLUE GROSBREAK.—Apparently a rare migrant on the Gulf Coast. On April 25, 1887, I took a male near Tarpon Springs and saw another. These are the only records that I have made personally and Mr. Atkins has not met with the species.

Passerina cyanea. INDIGO BUNTING.—I have no records for the Gulf Coast. Mr. Atkins says: "One record at Key West, an adult female taken April 12, 1887. Richly plumaged males are sometimes trapped by the boys in the spring. I have seen several that were so taken. I did not meet with the bird at Punta Rassa."

Passerina ciris. PAINTED BUNTING.—A rather common migrant and a few breed in the vicinity of Tarpon Springs. Mr. Atkins says "rather common migrant both at Punta Rassa and at Key West. Probably a few birds are resident at Punta Rassa where it breeds. Not observed in the breeding season at Key West."

Spiza americana. DICKCISSEL.—Mr. Atkins secured a single representative of this species at Key West, April 30, 1889. This is the only record that he has made and I have not met with the species.

Piranga erythromelas. SCARLET TANAGER.—This is a regular migrant but more common in spring than in fall in the vicinity of Tarpon Springs. At this point in spring the birds appear late in April, from the 24th to the 29th of the month, and are rather rare, remaining till May 2, later than which I have no records. Mr. Atkins did not note Scarlet Tanagers at Punta Rassa, but has taken the species at Key West on April 27 and 29, 1889, when he secured one bird on each day.

Piranga rubra. SUMMER TANAGER.—A migrant and summer resident in the vicinity of Tarpon Springs, where the species breeds in numbers. Here the birds arrive as early as the 4th of April, and females taken on the 18th and 20th of that month were laying or about to lay. They remain till late in September. On the 20th of that month in 1887 I secured an adult male in the *red plumage*, which had fully completed the fall moult. Mr. Atkins says the species occurs sparingly at Key West and at Punta Rassa as a migrant. His records at Punta Rassa are April 12, 1886, and

again on several occasions in October of the same year. At Key West he observed them on April 18 and 29, 1887, and on October 11 and 13, 1888, they were more abundant than at any other time.

Progne subis cryptoleuca. CUBAN MARTIN.—It seems probable that all Martins found *breeding* on the Gulf Coast of Florida, at least as far north as Tarpon Springs, are referable to this form, and though the material that I have before me is limited, yet one of the male birds is fairly intermediate between *P. subis* proper and what I think will ultimately have to be considered as the subspecies *P. subis cryptoleuca*, though the latter is now given specific rank. (See Check-List of North American Birds. Abridged Edition, Revised, 1889, p. 55, No. 611.1.) I have submitted material collected in the vicinity of Tarpon Springs to Mr. J. A. Allen, who concurs in the above views and from whose letters on the subject I quote as follows: "The Martins I should refer to *Progne subis cryptoleuca*, of which the single female and two of the males are fairly typical, judging from my limited material. The other male I should consider *an intermediate* between *P. subis* and *P. subis cryptoleuca*, which latter I believe at least only a geographical race of *P. subis*." As the birds are abundant in the breeding season in the town of Tarpon Springs and as I am expecting additional representatives from at least two points to the south on the Gulf Coast, as well as from Key West, I hope at an early date with more abundant material to deal conclusively with the subject. At Tarpon Springs it is difficult to obtain the birds as they are almost confined to the town limits, where shooting of all birds at any season is prohibited. At this point the first Martins to arrive are seen as early as the first week in March, but I suspect these are representatives of true *P. subis* on their way north, as the birds that frequent the Martin boxes in the town do not seem at all common until the first week in April, and do not nest until the middle or last of that month. Mr. Atkins noticed the first Martins at Punta Rassa on March 20, 1886, and saw them frequently during the summer "at a point on the beach near the pine trees." "Evidently breeds." He has also noted Martins as rather common migrants at Key West, but has not found them breeding at that point.

Chelidon erythrogaster. BARN SWALLOW.—A common spring and very abundant fall migrant, and a few are met with in warm days throughout the winter, in the vicinity of Tarpon Springs. Some few breed at or near the same point. Mr. Atkins's observations at Punta Rassa and Key West coincide with what I have written above, except that he has not observed the birds breeding, though he has seen them at Key West on June 11, and again on August 6-10 in numbers.

Tachycineta bicolor. TREE SWALLOW.—A more abundant migrant and winter resident in the region about Tarpon than the last. Mr. Atkins finds them to be much rarer migrants than the Barn Swallow at both Punta Rassa and Key West.

Clivicola riparia. BANK SWALLOW.—Observed in fall and spring as an uncommon migrant in the vicinity of Tarpon Springs. Mr. Atkins has not met with the species at either of the points on the Gulf coast where he has collected.

Stelgidopteryx serripennis. ROUGH-WINGED SWALLOW.—Not very common in April, 1887, in the vicinity of Tarpon Springs, which is the only point where I have observed the species.

Ampelis cedrorum. CEDAR WAXWING.—Observed in flocks feeding on mulberries in early April, 1887, at Tarpon Springs. At Hog Island, five miles south of Anclote Keys and four miles from the main land, I took four from a large flock that were feeding among the mangroves on May 2, 1888. Mr. Atkins has no records of the species at Punta Rassa or at Key West.

(To be continued.)

RECENT LITERATURE.

Barrows's Report on the English Sparrow in North America.*—This 'Report,' of about 400 pages, exhaustively treats the subject under consideration, presenting the evidence, pro and con, at great length, and with evident fairness. The work is based primarily on the replies of over three thousand observers to circulars of inquiry sent out by the Division of Economic Ornithology of the Department of Agriculture, and secondarily on previously published evidence, the whole carefully elaborated and thoroughly systematized. Part I, entitled 'Summaries of Evidence—Recommendations—Special Reports,' occupies pp. 17-194, and treats (1) of the importation, spread, and increase of the species, and the checks upon its increase; (2) of the injuries it inflicts in various ways upon fruits, grains, and garden vegetables; (3) its relation to other birds; (4) its relation to insects; and contains (5) recommendations for legislation, and suggestions to the people at large; (6) a paper by Dr. A. K. Fisher, Assistant Ornithologist of the Division, on the destruction of the Sparrow by poisons; (7) a paper on trapping Sparrows (illustrated), by Mr. W. T. Hill; and (8) a history of the English Sparrow and European Tree Sparrow (*Passer montanus*) at Saint Louis, Mo., by Mr. Otto Widmann. This Part also includes a paper of 20 pages by Prof. C. V. Riley, Entomologist of the Department of Agriculture, on the 'Relation of the Sparrow to Insects,' based on the examination of the contents of over 500 Sparrow stomachs, followed by tabular statements of food, as shown by dissection of Sparrows' stomachs made at the Department of Agriculture.

* U. S. Department of Agriculture. | Division of Economic Ornithology and Mammalogy. | Bulletin I. | — | The | English Sparrow | (*Passer domesticus*) | in North America, | especially in its Relation to Agriculture. | — | Prepared under the direction of | Dr. C. Hart Merriam, Ornithologist, | by | Walter B. Barrows, | Assistant Ornithologist. | — | Washington : | Government Printing Office. | 1889.—8vo, pp. 405, with map.