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crops of small fruits. Average set, four eggs (3–5). Fresh eggs April 20–July 10.

114. Sialia mexicana bairdi. CHESTNUT-BACKED BLUEBIRD.—Common from 7,500 to 9,000 feet. Average set, 5 eggs (4–6). Fresh sets May 20–June 20.

115. Sialia currucoides. MOUNTAIN BLUEBERD.—Abundant to 8,000 feet. Average set, five eggs. Fresh sets May 1-June 20.

United States Indian School, Santa Fé, New Mexico.

## OBSERVATIONS ON THE BIRD LIFE OF PORTO RICO.

## BY PARKE H. STRUTHERS.

It has been my privilege during the past eighteen months to study bird life in Porto Rico and the two neighboring islets Mona and Desecheo. Much of the time has been spent in preparing a collection which includes all the species referred to in the following notes. The data, with but two exceptions, was obtained from observations made on the western third of the island, that is, all west of a line drawn between Arecibo and Ponce.

Of the one-hundred and sixty odd bona fide species and subspecies recorded from Porto Rico, Mona and Desecheo, nearly one half migrate elsewhere for a part of the year. Certain resident species have a tendency to migrate locally, while on the other hand there are species that have not been recorded outside of a twenty-five mile radius.

The following notes do not cover all the species recorded for the region, but those which I have had the opportunity to observe. The data are presented with an idea of increasing the supply of knowledge already at hand concerning the dates of migration to and from the region together with some observations on breeding species.

**Podilymbus podiceps antillarum** (Bangs). ANTILLEAN GREBE. — Seen throughout the year, although more common from October to May. February 18, 1922, I photographed a nest containing six eggs. A male collected December 10, 1921, was still in summer plumage.

**Colymbus dominicus dominicus** (Linnaeus). WEST INDIAN GREBE. --Observed throughout the year on the large lagoons. Nests with from one to seven eggs were noted from November 5, 1920 to April 2, 1921. During the summer this Grebe congregated in large flocks in the center of the lagoons.

**Phaethon americanus** (Grant). YELLOW-BILLED TROPIC BIRD.—A pair were noted January 17, 1922, on the cliffs west of Quebradillas. On Mona Island they were very common July 14 to 18, 1921.

**Pelecanus occidentalis** (Linnaeus). BROWN PELICAN.—Observed throughout the year. A rookery near Aguirre was visited January 31, 1922, and one near Rincon, March 4, 1922. One pair were noted on Mona Island July 16, 1921.

Sula leucogastra (Boddaert). BOOBY.—Occasionally seen along the coast of Porto Rico. Many were found on Mona Island in July 1921, especially birds in the first year plumage. I estimated that there were twenty-five hundred individuals on Desecheo, at the time of my visit in January, 1922, many of which were nesting.

**Sula piscator** (Linnaeus). RED-FOOTED BOOBY.—A colony of about two hundred individuals were nesting on Desecheo at the time of my visit in January 1922. The nests consisted of a platform of sticks placed in the West Indian birch (*Elaphrium simarubra*).

Fregata magnificens (Matthews). MAN-O'-WAR-BIRD.—Often seen flying along the coast and over the large lagoons. About thirty birds were noted on Mona Island in July, 1921. At the time of my visit to Desecheo in January, 1922, I estimated that there were about three hundred individuals practically all of which were nesting. Three separate rookeries were found.

Nyctanassa violacea (Linnaeus). YELLOW-CROWNED NIGHT HERON. -Noted throughout the year about the lagoons of the Guanica Valley and in the mangrove swamps along the coast.

Nycticorax nycticorax naevius (Boddaert). BLACK-CROWNED NIGHT HERON.—On October 29, 1921, I found a flock of six birds, two adults and four immature, in a grassy meadow near Mayaguez. Several other observations were made at Anegado lagoon one mile south of La Plata.

**Butorides virescens cubanus** (Oberholser). CUBAN GREEN HERON. --Very commonly observed in the lowlands. Nests containing three eggs each, were found in the reeds at Guanica lagoon, April 2, 1921.

Florida caerulea caerulescens (Latham). LITTLE BLUE HERON. — Very commonly observed in the lowlands. Four nests containing young birds were found in the mangroves west of Boqueron June 15, 1921.

**Hydranassa tricolor ruficollis** (Gosse). LOUISIANA HERON. — Occasionally seen singly throughout the year in the mangrove swamps and along the grassy shores of lagoons.

**Egretta candidissima candidissima** (Gmelin). SNOWY EGRET. — This species is apparently becoming common again for on all trips to the large lagoons and the mangrove swamps near Boqueron I saw from fifty to two hundred individuals.

**Casmerodius egretta** (Gmelin). AMERICAN EGRET.—Ten individuals were noted throughout the year in the mangrove swamps near Boqueron.

Ardea herodias adoxa (Oberholser). WEST INDIAN GREAT BLUE HERON.—Five birds made their home on the shallow east shore of Anegado lagoon, where they were noted on all trips to the region. Two individuals were seen in the mangroves near Boqueron June 15, 1921.

**Ixobrychus exilis exilis** (Gmelin). LEAST BITTERN.—Observed frequently at Anegado and Guanica lagoons. Eggs were collected, on April 2, 1921, from a nest built in the rushes bordering Guanica lagoon.

Botaurus lentiginosus (Montague). BITTERN.—One was taken on September 23, 1921, in a mangrove thicket south of Bouqueron.

**Erismatura jamaicensis** (Gmelin). Ruby DUCK.—Observed throughout the year on the larger lagoons. During the period from December 1, 1921 to March 1, 1922, I found twenty-two nests at Anegado lagoon. Each nest contained from one to twelve eggs. Only one nest with downy young was found (February 18).

Marila affinis (Eyton). LESSER SCAUP DUCK.—Noted during the months of December, January and February on the large lagoons, in flocks numbering from fifty to two-hundred individuals.

**Poecilonetta bahamensis** (Linnaeus). BAHAMA PINTAIL. —Observed throughout the year on the large lagoons. A flock of eight young birds, unable to fly, were seen December 8, 1921, and twelve eggs were taken from a nest, on February 18, 1922, at Anegado lagoon.

Spatula clypeata (Linnaeus). SHOVELER.—A flock of six were seen February 18, 1922, at Anegado lagoon.

Querquedula discors (Linnaeus). BLUE-WINGED TEAL.—Seen during the winter at Catagena and Anegado lagoons. My earliest fall record was October 8, 1921. The birds arrived from the north in flocks numbering sometimes three-hundred individuals, but these were soon divided into small groups which scattered over the flooded forest and grass lands bordering the lagoons.

**Dendrocygna autumnalis** (Linnaeus). BLACK-BELLIED TREE DUCK. —On December 3, 1921, I found four roosting in some dense bushes at Anegado lagoon. February 18, 1922, in the same region, I collected two eggs and two nestlings from a hollow in a dead tree. A native living near Caba Rojo has a flock of six which he captured a year ago when the birds were young.

**Cathartes aura aura** (Linnaeus). TURKEY VULTURE.—About fifty individuals inhabit the Guanica valley and only twice have I recorded the Vulture outside of this region. June 13, 1921, an observation was made near Anaisco and another December 23, 1921, at Ponce. An immature male was collected at Catagena lagoon in August 1921.

**Falco sparverius loquacula** (Riley). PORTO RICAN SPARROW HAWK. —Observed throughout the year in the coastal plains. Two young birds, unable to fly, were noted July 30, 1921, in a cocoanut grove near Anaisco.

Falco columbarius columbarius (Linnaeus). PIGEON HAWK.—A male bird was collected November 8, 1920, in a coffee finca belonging to the Federal Experimental Station at Mayageuz.

**Falco peregrinus anatum** (Bonaparte). DUCK HAWK.—Observed during the winter at Catagena and Anegado lagoons. A male bird was collected December 3, 1921, at Anegado lagoon. My earliest fall record was August 8, 1921.

**Buteo borealis** (Gmelin). RED-TAILED HAWK.—Observed throughout the year in the foot-hills and mountains. A nest with two eggs was found April 16, 1921 near Mayaguez.

Accipter striatus venator (Wetmore). PORTO RICAN SHARP-SHINNED HAWK.—Taken November 11 and December 26, 1921, near Maricao.

Pandion haliaëtus carolinensis (Gmelin). OSPREY.—A male bird was taken on the cost two miles west of Boqueron January 15, 1921.

Fulica americana (Gmeln). AMERICAN COOT. —Observed throughout the year at Catagena and Anegado lagoons. Nests containing from four to seven eggs were found at Anegado from November 11, 1921 to March 1, 1922. A negro egg hunter, whom I met at the lagoon February 18, 1922, boasted that during the previous month he had collected twelve hundred Coot eggs. His statement was confirmed by the station agent at La Blata through whom the eggs were sold. During the summer of 1921, Guanica and Anegado lagoons dried up completely leaving Catagena as the only refuge for the water birds living in the valley. A survey of the birds at Catagena during this period,made by myself, showed the Coots to be by far the most abundant specie present and numbering about three thousand individuals.

Gallinula galeata galeata (Lichtenstein). FLORIDA GALLINULE. — Seen throughout the year in the lagoons and swamps. Four eggs were collected from a nest at Anegado lagoon, December 10, 1921. A nest with seven newly hatched young was found at Catagena, August 18, 1921.

**Ionornis martinicus** (Linnaeus). PURPLE GALLINULE.—An occasional observation was made throughout the year at Catagena. A flock of ten birds, four in immature plumage, was observed at Anegado lagoon February 18, 1922.

**Porzana carolina** (Linnaeus). CAROLINA RAIL.—Observed during the winter about the large lagoons. My earliest fall record was October 8, 1921, and the latest spring record March 25, 1921.

**Rallus longirostris caribaeus** (Ridgway). CARIBBEAN CLAPPER RAIL.—Seen in the mangrove swamps along the coast throughout the year. Eight eggs were collected September 23, 1921, near Boqueron.

Ochthodromus wilsonius rufinuchus (Ridgway). RUFOUS-NAPED PLOVER.—Collected July 23, 1921, on the coast near Anaisco and again July 25, 1921, at Porto Real.

**Charadrius semipalmatus** (Bonaparte). SEMIPALMATED PLOVER. — This specie was collected during every month in the year, although it was much more common from October to May.

**Oxyechus vociferus rubidus** (Riley). ANTILLEAN KILLDEER.—Observed throughout the year. Eggs were collected May 9, 1921, at Guanica lagoon.

**Phivialis dominica dominica** (Müller). GOLDEN PLOVER.—A male bird in winter plumage was collected from a flock of six flying over the mud flats at Anegado lagoon November 4, 1921.

**Arenaria interpres morinella** (Linnaeus). RUDDY TURNSTONE.—Observed during the winter along the coast, especially in the vicinity of Guanajibo Point. My earliest fall record was August 9, 1921, and the latest spring record May 7, 1921. All birds seen were in winter plumage.

Actitis macularia (Linnaeus). SPOTTED SANDPIPER. — A very common specie in the coastal plains and observed throughout the year. Birds in immature plumage appeared along the shores about August first.

**Bartramia longicauda** (Bechstein). UPLAND PLOVER.—I examined a specimen collected by Mr. Frank Potts, in September, near the Aguirre Sugar Central.

**Catoptrophorus semipalmatus semipalmatus** (Gmelin). WILLET. —A flock of thirty birds were observed on all trips to the mangrove swamps south of Boqueron between November 1920, and March 25, 1921. On December 17, 1921 I saw two birds in the same swamp.

Tringa solitaria solitaria (Wilson). SOLITARY SANDPIPER. — Observed from November 1920, to May, 7 1921, on the edges of small salt water lagoons near Porto Real.

Totanus flavipes (Gmelin). LESSER YELLOW-LEGS.—A common winter visitor. My first fall record was August 1, 1921, and the latest spring record April 9, 1921.

Totanus melanoleucus (Gmelin). GREATER YELLOW-LEGS.—Observed frequently during the winter in the wet regions along the coast. My earliest fall record was July 23, 1921, and the latest spring record March 19, 1921.

**Crocethia alba** (Pallas). SANDERLING.—A pair were observed March 4, 1922, at the mouth of the Rio Blanco near Anaisco. They were with a flock of Semipalmated Plover. I collected one bird.

**Pisobia minutilla** (Vieillot). LEAST SANDPIPER.—Recorded each month in the year, but more abundant during September and May. One pair were seen July 15, 1921 on Mona Island.

**Pisobia maculata** (Vieillot). PECTORAL SANDPIPER.—They were very common at Guanica lagoon October 22, 1921. One or two birds were seen in the same region throughout the winter.

Gallinago delicata (Ord). WILSON'S SNIPE.—Very common at Guanica lagoon October 22, 1921. After November only a few birds were observed during the winter. My earliest fall record was August 29, 1921.

**Himantopus mexicanus** (Müller). BLACK-NECKED STILT.—Seen throughout the year about the large lagoons and mud flats near the coast. On August 1, 1921 eggs and young birds were collected at Guanica lagoon.

Larus atricilla (Linnaeus). LAUGHING GULL.—Observed during the summer about Mayaguex harbor. Thirty individuals were seen at Mona inland during my visit in July 1921. My earliest spring record was April 23, 1921, and the latest fall record August 17, 1921.

Chlidonias nigra surinamensis (Gmelin). BLACK TERN.—Twenty individuals were noted, between August 18, 1921, and September 10, 1921, at Catagena lagoon. All specimens collected were in winter plumage.

Sterna fuscata (Linnaeus). SOOTY TERN.-Several were seen July 15, 1921 between Porto Rico and Mona Island.

**Sterna antillarum** (Lesson). LEAST TERN.—A flock of twenty were found nesting on a sandy beach near the lighthouse at Cape Rojo, August 9, 1921.

Sterna hirundo (Linnaeus). COMMON TERN.—A common summer visitor along the coast. My earliest spring record was March 4, 1922, and the latest fall record October 29, 1921.

Sterna maxima (Boddaert). ROYAL TERN.—Two birds were taken near Rincon lighthouse June 22, 1921.

Geotrygon montana (Linnaeus). RUDDY QUAIL-DOVE.—Seen eighteen times in the foot-hills and mountains.

**Chaemepelia passerina trochila** (Bonaparte). PORTO RICAN GROUND DOVE.—A very commonly observed specie throughout the coastal plains. Eggs were collected May 7, 1921, near Guanajibo point.

**Chaemepelia passerina exigua** (Riley). MONA GROUND DOVE. — Very common on Mona Island at the time of my visit in July, 1921.

Zenaida zenaida lucida (Noble). PORTO RICAN DOVE.—Seen throughout the year in the cocoanut and citrus groves in the coastal regions. One bird was taken on Desecheo island January 22, 1922. Eggs were collected during June, 1921.

Columba leucocephala (Linnaeus). WHITE-CROWNED PIGEON.—A pair were collected December 15, 1921, in a citrus grove near Mayaguez.

**Columba squamosa** (Bonnaterre). SCALED PIGEON.—Seen on trips to the mountains, especially during December and January when the birds congregated in the royal palms (*Roystonea borinquena*) to feed on the ripe berries borne by that tree. It was very common on Mona Island at the time of my visit in July 1921.

Coccyzus minor nesiotes (Cabanis). MANGROVE CUCKOO. --Common throughout the coastal plains.

Saurothera vieilloti (Bonaparte). VIEILLOT'S CUCKOO.—Very common at Maricao during my visits to the region. It was recorded six times in the hills near Mayaguez. I observed a pair building their nest February 13, 1921 near Consomo.

Crotophaga ani (Linnaeus). ANI.—Observed throughout the cultivated coastal plains.

**Melanerpes portoricensis** (Daudin). PORTO RICAN WOODPECKER. — Noted throughout the regions visited on Porto Rico.

Todus mexicanus (Lesson). PORTO RICAN TODY.—Common in the mountains and foot-hills and seen twice in the mangroves near the coast. A pair noted March 2, 1922 near Mayaguez were preparing their nesting burrow.

Ceryle alcyon alcyon (Linnaeus). BELTED KINGFISHER.—A commonly observed winter visitor. First fall record was on September 23, 1921, and the latest spring record May 21, 1921. A pair were seen on Mona Island, July 16, 1921.

**Gymnasio nudipes nudipes** (Daudin). BARE-LEGGED OWL.— Common in the foot-hills and coastal plains and occasionally encountered in the mountains. An immature bird, with its head still covered with down, was taken August 2, 1921 at Mayaguez.

**Chordeiles virginianus minor** (Cabanis). CUBAN NIGHTHAWK.— A male bird was collected August 9, 1921, near the lighthouse at Cape Rojo and another observed August 18, 1921 at Mayaguez.

Chlorostilbon maugoei (Audebert and Vieillot). PORTO RICAN EMERALD.—Common in all regions of Porto Rico visited. A nest containing two eggs was collected March 23, 1921 at Maricao.

Anthracothorax viridis (Audebert and Vieillot). GREEN MANGO. — Common in the coastal regions. A pair nested near my house during February 1922.

Anthracothorax aurulentus (Audebert and Vieillot). PORTO RICAN MANGO.—One was collected at Boqueron December 17, 1921. It was also observed several times at Maricao (December 28 to 31).

Nephoecetes niger jamaicensis (Ridgway). JAMAICAN BLACK SWIFT.—Observed December 11, 1920 at Guanica; June 30, 1921, at Mayaguez; August 29, 1921 and February 4, 1922 at Catagena lagoon.

**Tyrannus dominicensis dominicensis** (Gmelin). GRAY KINGBIRD. — Noted throughout the coastal plains, especially the dry south coast. Not observed in the mountains. One pair was taken on Mona Island July 16, 1921

Tolmarchus taylori (Sclater). PORTO RICAN PETCHARY.—Noted in the coastal regions, foot-hills and as far inland as Maricao. Ten birds were seen on Mona Island during my stay there in 1921.

Myiarchus antillarum (Bryant). ANTILLEAN FLYCATCHER. —Occasionally seen throughout the regions visited on Porto Rico.

Blacicus blancoi (Cabanis). PORTO RICAN WOOD-PEWEE. —Common in the foot-hills and around Maricao.

Hirundo erythrogastra (Boddaert). BARN SWALLOW.—Observed August 29, October 8, and March 21, 1921 at Catagena lagoon and February 18, 1922 at Anegado lagoon.

**Riparia riparia riparia** (Linnaeus). BANK SWALLOW.—Taken February 18, 1922 at Anegado lagoon.

**Petrochelidon fulva poeciloma** (Gosse). JAMAICAN CLIFF SWALLOW. —Observed throughout the year especially in the vicinity of lagoons and cultivated lands. Young birds were observed on the wing during the latter part of July 1921.

**Progne dominicensis** (Gmelin). CARIBBEAN MARTIN.—Observed throughout the summer. My earliest spring record was February 2, 1922 and the latest fall record October 8, 1921. Several nests were found

during May, 1921 in cavaties in dead cocoanut palms. Six pairs made their home in the tower of the Priest's house, situated in the center of Mayaguez.

Margarops fuscatus fuscatus (Vieillot). PEARLY-EYED THRASHER. —Two birds were taken December 29, 1921 at Maricao, where the specie was quite common. I only recorded it twice in the coastal plains, once in a cocoanut grove near Rincon and again in a hillside thicket near Mayaguez.

Mimus polyglottos orpheus (Linnaeus). JAMAICAN MOCKINGBIRD. —Common in the coastal plains and foot-hills, but not seen in the mountains.

**Mimocichla ardosiacea portoricensis** (Bryant). PORTO RICAN THRUSH.—A common specie in the citrus and coffee fincas. During my stay at Maricao in December 1921 they were congregated in the royal palms (*Roystonea borinquena*), where they feasted on the ripe berries.

**Vireo latimeri** (Baird). LATIMER'S VIREO.—Observed throughout the year in the wooded regions. During April especial attention was attracted to these birds by the active singing of the males.

**Vireosylva calidris calidris** (Linnaeus). JAMAICAN VIREO. —Observed throughout the summer. My earliest record for arrivals was February 12, 1921.

Setophaga ruticilla (Linnaeus). AMERICAN REDSTART.—Observed during the winter. The earliest fall record was September 23, 1921, and the latest spring record April 9, 1921. This was one of the commonest visiting Warblers.

Seiurus noveboracensis noveboracensis (Gmelin). WATER-THRUSH. —Observed during the winter in the coastal regions. The earliest fall record was September 23, 1921 and the latest spring record April 23, 1921.

Seiurus motacilla (Vieillot). LOUISIANA WATER-THRUSH.—Observed during the winter along the rivers and brooks. My earliest fall record was August 31, 1921, and the latest spring record March 25, 1921.

Seiurus aurocapillus (Linnaeus). OVEN-BIRD.—Frequently seen in the wooded foot-hills and mountains during the winter. I have never heard the characteristic northern call notes uttered in Porto Rico. My earliest fall record was October 18, 1921 and the latest spring record April 18, 1921.

**Dendroica striata** (Forster). BLACK-POLL WARBLER.—One bird was seen November eleventh and another November twelfth (1921) in a coffee finca near Maricao.

**Dendroica adelaidae** (Baird). ADELAIDE'S WARBLER.—A common Warbler on the bush-covered hillsides of the dry coastal plains. Several pairs were seen nesting during May 1921.

**Dendroica dominica dominica** (Linnaeus). SYCAMORE WARBLER. — One bird was observed in the shade trees at Aguirre Central January 29, 1922.

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**Dendroica coronata** (Linnaeus). MYRTLE WARBLER. —Very common during the winter in the low bushes bordering the lagoons in the Guanica valley.

**Dendroica caerulescens caerulescens** (Gmelin). BLACK-THROATED BLUE WARBLER.—Specimens were collected December 27 and 30, 1921 in the dense wooded regions above Maricao.

**Dendroica tigrina** (Gmelin). CAPE MAY WARBLER.—Observed November 24, and January 14, 20 and 22, 1921, in a coffee finca near Mayaguez and on February 26, 1922 in a mangrove swamp south of Boqueron.

**Dendroica discolor** (Vieillot). PRAIRIE WARBLER.—Often seen during the winter in brush-covered pastures and the edges of fincas.

**Dendroica petechia bartholemica** (Sundevall). PORTO RICAN YELLOW WARBLER.—Often observed in the mangrove swamps and the wooded areas bordering lagoons.

**Compsothlypis americana usneae** (Brewster). NORTHERN PARULA WARBLER.—Observed throughout the winter in all regions visited (Porto Rico). The first fall record was August 10, 1921 and the last spring record May 7, 1921.

Mniotilta varia (Linnaeus). BLACK AND WHITE WARBLER. —Observed frequently in the coffee and citrus fincas of the foothill and mountain regions. I obtained one summer record July 15, 1921, but the general migration arrived in August. My latest spring record was April 18, 1921.

**Coereba portoricensis** (Bryant). PORTO RICAN HONEY CREEPER. —Very commonly observed in all regions visited on Porto Rico. I recorded some pairs breeding as many as four times in one year.

**Spermestes cucullata** (Swainson). HOODED WEAVER FINCH.—A resident observed usually in flocks of from five to twelve individuals. One flock nested in a royal palm tree on the Federal Experimental Station grounds at Mayaguez during during July, 1921.

**Amandava melpoda** (Vieillot). SCARLET-CHEEKED WEAVER FINCH. — This specie was common in the vicinity of Caba Rojo and was once taken at Anaisco.

**Agelaius xanthomus** (Sclater). YELLOW-SHOULDERED BLACKBIRD. — A common specie in the coastal plains especially near fresh or brackish water swamps and lagoons.

**Icterus portoricensis** (Bryant). PORTO RICAN ORIOLE.—Frequently observed in the citrus and coffee fincas and about royal palms.

Holoquiscalus brachypterus (Cassin). PORTO RICAN BLACKBIRD. —Common throughout the coastal regions. Eggs were collected at Anegado lagoon December 3, 1921, from nests placed in the low, thorny Palo de Royo (*Parkinsonia oculeata*) trees growing on the edge of the lagoon. I have also observed them nesting in the royal palm trees at Mayaguez.

**Nesospingus speculiferus** (Lawrence). PORTO RICAN TANAGER. — On all my trips to Maricao I found this specie inhabiting the citrus and coffee fincas, but did not see it elsewhere on the island. **Spindalis portoricensis** (Bryant). PORTO RICAN SPINDALIS.—This specie was frequently seen in the citrus fincas and in the low vegetation growing along the beach at Boqueron.

**Tanagra sclateri** (Sundevall). PORTO RICAN EUPHONIA.—A male bird was collected near Mayaguez January 13, 1921. Natives coming from Arecebo sold many in the market-place at Mayaguez at fifty cents a piece, but in all instances I know of the birds soon died.

Loxigilla portoricensis (Daudin). PORTO RICAN GROSBEAK. — Observed on all trips to the coffee and citrus fincas in the foot-hills and mountains. A nest containing three eggs was collected near Mayaguez March 18, 1921.

**Tiaris bicolor omissa** (Jardine). CARIB GRASSQUIT.—A common resident observed throughout the regions visited on Porto Rico. Several pairs were noted nesting about my house. In each case the incubation period was eleven days. Several broods are raised each year by one pair.

Tiaris olivacea bryanti (Ridgway). BRYANT'S GRASSQUIT.—Occasionally seen in the coastal regions but more common in the mountains. I collected eggs November 22, 1921 at Maricao.

Coturniculus savannarum intricatus (Hartert). SANTO-DOMINGAN GRASSHOPPER SPARROW.—A flock of six birds were observed at Manati January 14, 1922 in the low bushes along the roadside. I did not see the specie on the western end of the island.

University of Porto Rico, Mayaguez, P. R.

## NOTES ON SUMMER BIRDS OF THE MAMIE LAKE REGION, WISCONSIN.

BY HARTLEY H. T. JACKSON.

## Plates XXX

The list of birds here presented is a result of investigations in the region of Mamie Lake pursued as a part of a study of the distribution of the land vertebrates of Wisconsin under the auspices of the United States Biological Survey, the Wisconsin Geological and Natural History Survey and the University of Wisconsin cooperating. Two visits were made to the region; one extended from noon August 22 to the morning of August 31, 1917; the other from the afternoon of June 5, to the morning of June 24, 1918. During the first visit Dr. F. Gregory Hall was assistant in the work; during the second, Mr. Arthur J. Poole. Headquarters were