

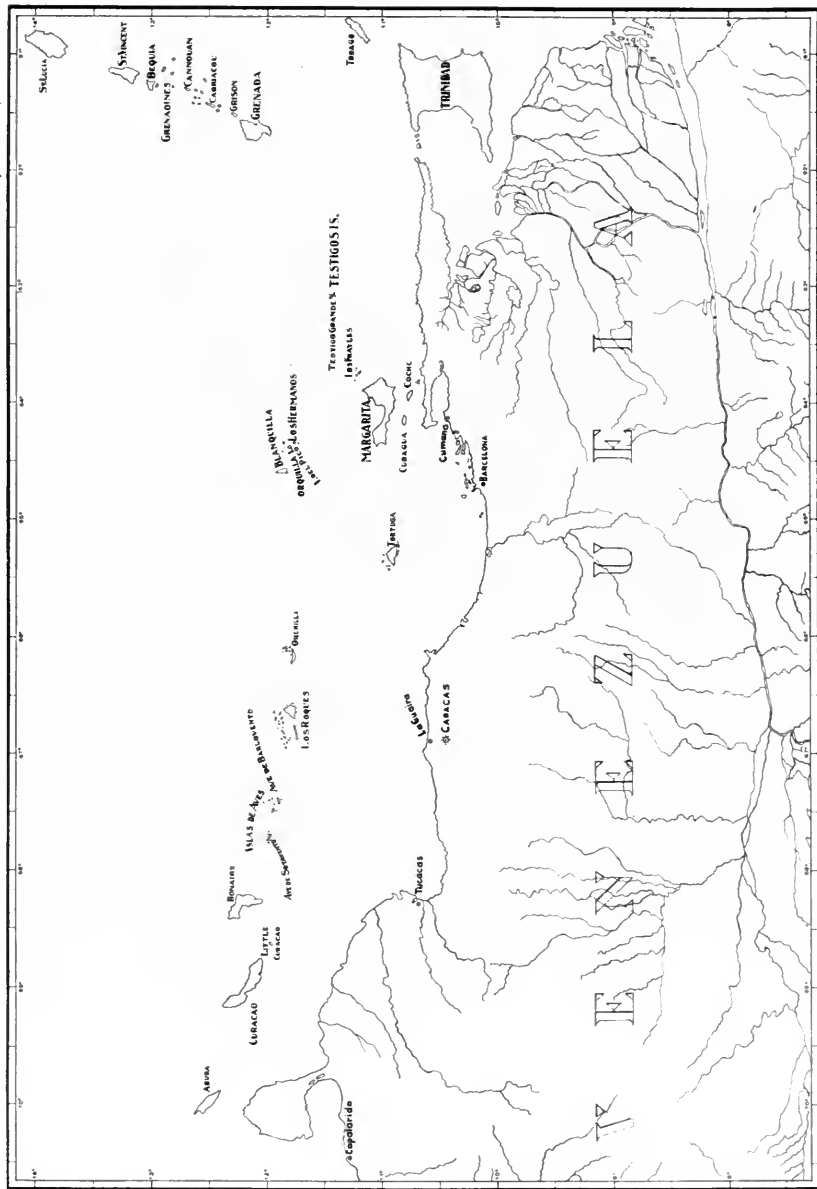
Field Museum of Natural History
LIBRARY

Chicago

From *Field Museum of
Natural History*

Class ~~19.15~~

Book ~~F. 502~~



FIELD MUSEUM OF NATURAL HISTORY.

PUBLICATION NO. 137.

ORNITHOLOGICAL SERIES.

VOL. I, No. 5.

THE BIRDS OF THE LEEWARD
ISLANDS, CARIBBEAN SEA

BY

CHARLES B. CORY,
Curator of Department of Zoology.



CHICAGO, U. S. A.

October, 1909.

THE BIRDS OF THE LEEWARD ISLANDS, CARIBBEAN SEA.

INCLUDING THE ISLANDS OF

ARUBA, CURAÇAO, BONAIRE, ISLAS DE AVES, LOS ROQUES,
ORCHILLA, TORTUGA, BLANQUILLA, LOS HERMANOS,
TESTIGOS IS., AND MARGARITA.

BY CHARLES B. CORY.

In the spring of 1908 Mr. John F. Ferry and Dr. Ned Dearborn made a short visit to the islands of Aruba, Curaçao and Bonaire for the purpose of collecting zoological material for this Museum, Mr. Ferry devoting his time to Aruba and Bonaire, and Dr. Dearborn to Curaçao; and in January of the present year (1909) Mr. Ferry returned to Curaçao, where he chartered a schooner and made collections on the islands of Bonaire, Islas de Aves, Los Roques, Orchilla, Tortuga, Blanquilla, Los Hermanos, Testigos Is. and Margarita, the ornithological results of both of these expeditions being summarized in the present paper, together with a list of the species previously recorded from the islands by other writers.

ARUBA ISLAND.

The Island of Aruba or Oruba, as it is sometimes called, is 17 miles long and about 4 miles in width, and is situated 16 miles north of Cape San Roman, Venezuela, and 43 miles west of Curaçao. A large part of the island is low and barren, but there are two irregular and comparatively high hills in the interior. The vegetation is scattered and consists principally of cacti of several species and occasional groves of palms and tamarinds, while mangroves are common along the shores. Fruit trees of various species are cultivated in some localities, as is also the Dividivi-tree (*Libidibi coriacea*).

ORNITHOLOGICAL BIBLIOGRAPHY.

1882. LAWRENCE, G. N. Descriptions of new Species of Birds of the Genera *Chrysotis*, *Formicivora* and *Spermophila*, Ann. N. Y. Acad. Sciences, Vol. II, 1883, p. 381. (Description of *Chrysotis canifrons* from Aruba.)

1888. MARTIN, K. Bericht über eine Reise nach Neiderländische Westindien, Leiden, 1888, p. 141. (Mentions several species of birds.)
1892. HARTERT, E. Bull. Brit. Orn. Club, No. iii, 1892, p. xii. (Description of *Myiarchus brevipennis*.)
1892. HARTERT, E. Bull. Brit. Orn. Club, No. iv, 1892, p. xvi. (Description of *Conurus arubensis*.)
1893. HARTERT, E. On the Birds of the Islands of Aruba, Curaçao and Bonaire. Ibis, 1893, p. 289.
1902. HARTERT, E. Die mit Sicherheit festgestellten Vögel der Inseln Aruba, Curaçao und Bonaire. Novitates Zoologicae, Vol. IX, 1902, pp. 295-309.

BIRDS OF ARUBA.

Mr. Ferry remained on Aruba from April 22 until May 16, 1908.

Family Laridae.

Larus atricilla Linn.

Not taken by Mr. Ferry but observed on several occasions; also recorded by Hartert. (Ibis, 1893, p. 311.)

Phaethusa magnirostris (Licht.).

A single male specimen taken May 12, 1908. It has not previously been recorded from the island.

Sterna maxima Bodd.

5 specimens taken, 3 males, 2 females. It was not uncommon.

Sterna eurygnatha Saunders.

1 specimen taken, a male. Although recorded from Margarita, it has not previously been taken here.

Sterna hirundo Linn.

1 specimen taken, others seen. Mr. Hartert (Ibis, 1893, p. 309) states that his specimens agree with *S. hirundo* but "are smaller and the bill somewhat less pointed." In the specimen before me the difference, if any, is very slight.

Sterna dougalli *Montag.*

Mr. Hartert states that he found this species breeding on the coral reef on the coast of Aruba (Ibis, 1893, p. 310). Judging from the color of the bill and feet, as Mr. Hartert suggests, these birds may be *S. d. gracilis* Cory. It was not taken by Mr. Ferry.

Sterna antillarum (*Less.*).

3 specimens taken; common. Mr. Hartert found it breeding and saw young birds in July.

Sterna fuliginosa *Gmel.*

1 specimen, an adult male, taken early in May.

Sterna anæthetus *Scop.*

Mr. Ferry did not procure this species, but Mr. Hartert found it breeding in some numbers on Aruba the latter part of June.

Family **Phalacrocoracidae.****Phalacrocorax vigua** (*Vieill.*).

Phalacrocorax brasiliannus Hartert, *Novitates Zoologicae*, 1902, p. 308.

1 specimen taken by Mr. Ferry, others seen. Mr. Hartert found it abundant "but difficult to approach." (Ibis, 1893, p. 308.)

Family **Pelecanidae.****Pelecanus occidentalis** *Linn.*

Pelecanus fuscus Hartert, Ibis, 1893, p. 308.

1 specimen taken; common.

Family **Fregatidae.****Fregata aquila** (*Linn.*).

1 specimen taken, an adult male; rather common.

Family **Phœnicopteridae.****Phœnicopterus ruber** *Linn.*

According to Hartert (Ibis, 1893, p. 307) a Flamingo was seen and shot by Dr. Cole. As *P. ruber* is not uncommon on Los Roques and has been recorded from Bonaire, it was probably this species.

Family **Plataleidae.**

Ajaia ajaia (*Linn.*).

1 specimen taken, a female. Apparently not previously recorded from these islands. Mr. Ferry also took a specimen on Margarita.

Family **Ardeidae.**

Egretta candidissima (*Gmel.*).

Recorded by Mr. Hartert as having been seen on Aruba and Bonaire; not observed by Mr. Ferry.

Hydranassa tricolor *Müll.*

Given by Hartert as occurring on Aruba, who states, "Not plentiful but of regular occurrence on Aruba and Bonaire. Identical with South American specimens but different from the Mexican subspecies, which is spread over the West Indies." (*Ibis*, 1893, p. 307.) Its *regular* occurrence on Aruba is surprising, as all specimens which I have examined from the islands (including Margarita and Trinidad) are *H. t. ruficollis*.

Hydranassa tricolor ruficollis (*Gosse*).

Mr. Ferry procured four specimens on Aruba and others on Margarita, all of which agree very well with specimens from the West Indies and are readily distinguished from specimens of *H. tricolor* from British Guiana and Brazil.

Florida cærulea (*Linn.*).

One adult specimen taken by Mr. Ferry.

Butorides virescens robinsoni (*Richmond*).

Two specimens taken, which I refer provisionally to this form, as they approach nearer to it than to *virescens*. Hartert refers his Aruba specimens to *B. virescens* (*Ibis*, 1893, p. 307) and suggests it is probably the bird called *B. striata* by Peters (*J. f. O.*, 1892, p. 121).

This group of Herons is decidedly in need of careful revision.

Family **Scolopacidæ.**

Pisobia maculata (*Vieill.*).

3 specimens, 1 ♂, 2 ♀.

Pisobia minutilla (*Vieill.*).

5 specimens, 1 ♂, 4 ♀.

Ereunetes pusillus (*Linn.*).

3 specimens, 2 ♂, 1 ♀.

Calidris leucophæa (*Pallas*).*Calidris arenaria* of authors.

1 ♂, others seen.

Totanus melanoleucus (*Gmel.*).

3 specimens, all males.

Totanus flavipes (*Gmel.*).

1 specimen, ♂.

Actitis macularia (*Linn.*).

1 specimen, ♂.

Family **Charadriidæ**.**Squatarola squatarola** (*Linn.*).

4 specimens, 2 ♂, 2 ♀.

Ægialitis semipalmata *Bonap.*

5 specimens, 3 ♂, 2 ♀.

Ochthodromus wilsonius rufinuchus (*Ridgw.*).

9 specimens, 7 ♂, 2 ♀.

Family **Aphrizzidæ**.**Arenaria interpres morinella** (*Linn.*).

7 specimens, 4 ♂, 3 ♀.

Family **Hæmatopodidæ**.**Hæmatopus palliatus** *Temm.*

1 specimen, ♂; others seen.

Family **Odontophoridae**.

Eupsychortyx cristatus (*Linn.*).

13 specimens, 6 ♂, 7 ♀.

The rufous color on the belly varies in intensity in different specimens, being only faintly indicated in some females; the latter also lack the black stripes above and below the ear coverts. Apparently occurs only on the islands of Aruba and Curaçao.

Family **Columbidae**.

Columba gymnophthalma *Temm.*

♂ taken May 11, 1908; not uncommon in some localities.

Leptotila verreauxi (*Bonap.*).

3 specimens taken, 2 ♂, 1 ♀; not uncommon.

Zenaida vinaceo-rufa *Ridgw.*

3 specimens, all males; common.

Chæmepelia passerina perpallida (*Hartert*).

14 specimens, 4 ♂, 10 ♀; common.

Family **Falconidae**.

Buteo albicaudatus colonus *Berlep.*

A bird supposed to be this subspecies was seen by Mr. Hartert (*Ibis*, 1893, p. 304). It was not taken by Mr. Ferry.

Falco sparverius brevipennis (*Berlep.*).

4 specimens, 2 ♂, 2 ♀.

The characters given by Berlepsch as distinguishing this subspecies seem fairly constant in birds from this island. The type is from Curaçao.

Polyborus cheriway (*Jacq.*).

1 specimen taken by Mr. Ferry.

Family **Strigidae.****Speotyto cunicularia** (Mol.).

5 specimens, 2 ♂, 3 ♀.

The specimens from Aruba apparently belong to this species. They are somewhat darker and browner than *S. brachyptera* from Margarita, and the inner bars on the outer web of the first primary are not connected as in birds from that island. The under wing coverts are unmarked. The measurements of the five Aruba specimens are as follows:

Wing, 6.	;	tail, 2.80;	tarsus, 1.75.
" 6.	;	" 3.	;" 1.70.
" 6.15;	" 2.95;	" 1.75.	
" 6.30;	" 3.	" 1.75.	
" 6.15;	" 2.80;	" 1.73.	

Family **Psittacidae.****Amazona ochroptera** (Gmel.).

Although this handsome Parrot is not uncommon in some parts of the island, it is shy. Mr. Ferry procured but one specimen, an adult female; others were seen.

Conurus æruginosus arubensis (Hartert).

Conurus arubensis Hartert, Bull. Brit. Orn. Club. No. iv, 1892, p. xvi.

8 specimens, 3 ♂, 5 ♀.

Very similar to *C. æruginosus*, and it is doubtful if it is worthy of more than subspecific recognition. The color of the forehead and sides of the head appear to be subject to considerable variation.

Family **Cuculidae.****Coccyzus minor** (Gmel.).

2 specimens, a male taken April 22, 1908, and a female taken May 4.

Coccyzus americanus (Linn.).

1 specimen, ♂, April 22.

Family **Trochilidæ**.**Florisuga mellivora** (*Linn.*).

Mr. Ferry took a single specimen on Aruba, an immature male beginning to assume the blue throat and which I refer provisionally to this species. The back is slightly more golden green than in other specimens in approximate stage of plumage from northern South America, and there are other slight differences, but not of sufficient importance to characterize it as an insular form, especially in a single specimen. It is probably a straggler from the mainland and not resident, as it has not previously been recorded from the island.

Chrysolampis mosquitus (*Linn.*).

8 specimens, 6 ♂, 2 ♀; common.

Chlorostilbon caribæus *Lawr.*

7 specimens, 6 ♂, 1 ♀.

Family **Tyrannidæ**.**Tyrannus dominicensis** (*Gmel.*).

3 specimens, 1 ♂, 2 ♀; common.

Tyrannus melancholicus satrapa (*Cab. & Heine*).

Mr. Ferry took a female specimen of this Flycatcher May 1, 1908. It has not previously been recorded from the island.

Myiarchus tyrannulus brevipennis (*Hartert*).

3 specimens, 1 ♂, 2 ♀.

Sublegatus glaber *Scl. & Salv.*

4 specimens, 2 ♂, 2 ♀.

Elænia martinica riisii (*Sclater*).

4 specimens, 2 ♂, 2 ♀.

Family **Icteridæ**.**Icterus icterus ridgwayi** (*Hartert*).

Mr. Ferry procured two specimens of this fine Oriole, a male and a female, on Aruba, which agree in size of bill with birds from Margarita (see note regarding this form under Margarita). Mr. Hartert

bases this subspecies largely on the size of the bill and feet, as compared with specimens from Cumana, Venezuela, and the Orinoco region (Novitates Zoologicae, Vol. IX, 1902, p. 299). The measurements of the Aruba specimens are as follows:

♂ wing 4.30; culmen 1.14; depth of bill at nostril .43.
 ♀ “ 4.20; “ 1.08; “ “ “ “ “ .40.

Birds from St. Thomas approach much nearer this form and differ decidedly in color and size of bill from birds from the mainland. The St. Thomas birds must either be considered to be *ridgwayi* or a new form; they are certainly different from true *Icterus icterus*. The under parts, collar and rump are bright yellow, with only a trace of orange, not decidedly orange or reddish orange as in *icterus* and *ridgwayi*. The bill averages larger than in either, some specimens having the culmen 1.25. The middle of the outer webs of primaries (except the first and second) are narrowly but distinctly edged with white, while in both *icterus* and *ridgwayi* there is merely a trace, and in many specimens from the mainland it is entirely wanting. Should a larger series of specimens prove these differences to be constant, I propose that the St. Thomas bird be recognized as *Icterus icterus harterti*.

***Icterus xanthornus curasoensis* (Ridgw.).**

8 specimens, 1 ♂, 7 ♀.

***Dolichonyx oryzivorus* (Linn.).**

1 specimen, ♂, April 25, 1908.

Family **Fringillidæ.**

***Spiza americana* (Gmel.).**

1 specimen, ♂, April 24, 1908.

***Brachyospiza capensis insularis* (Ridgw.).**

14 specimens, 10 ♂, 4 ♀; common.

***Tiaris sharpei* (Hartert).**

Euetheia sharpei Hartert, Bull. Brit. Orn. Club, Vol. I, No. vii, 1893, p. xxxvii.

13 specimens, 8 ♂, 5 ♀; common.

Family **Cœrebidæ.****Cœreba uropygialis** *Berlep.*

14 specimens, 6 ♂, 8 ♀.

Family **Mniotiltidæ.****Dendroica ruficapilla rufopileata** *Ridgw.*

11 specimens, 8 ♂, 3 ♀.

Family **Mimidæ.****Mimus gilvus rostratus** *Ridgw.*

9 specimens, 7 ♂, 2 ♀.

CURAÇAO ISLAND.

The Island of Curaçao is situated 43 miles east of Aruba. It is about 6 miles in width at its widest part. The central portion is high, rising from the coast in successive terraces, the highest part being known as San Cristoffel Mountain. It is situated in the northwestern portion of the island and has an elevation of 1255 feet.

The vegetation is similar to that of Aruba, although a considerable number of fruit orchards occur throughout the island. Dr. N. Dearborn's stay on Curaçao was limited to eight days, from March 24 to March 31, 1908, and nearly all of his specimens were taken about 12 miles west of the town of Willemstad in the western part of the island.

ORNITHOLOGICAL BIBLIOGRAPHY.

1874. LAWRENCE, G. N. Description of a new Species of Hummingbird from Curaçao. *Ann. N. Y. Lyc. Nat. Hist.*, Vol. X, p. 13. (Describes *Chlorostilbon caribæus*.)
1884. RIDGWAY, R. On a Collection of Birds made by Messrs. J. E. Benedict and W. Nye of the United States Fish Commission Steamer "Albatross," *Proc. U. S. Nat. Mus.*, Vol. VII, 1884, p. 173.
1888. MARTIN, K. Bericht über eine Reise nach Neiderländische Westindien, Leiden, 1888, p. 119.

1892. BERLEPSCH, H. v. Die Vögel der Insel Curaçao. Cabanis Journ. für Orn., 1892, pp. 62-104.
1892. PETERS, E. Die Vögel Curaçaos. Cabanis Journ. für Orn., 1892, pp. 104-122.
1892. HARTERT, E. Bull. Brit. Orn. Club, No. iii, 1892, pp. xii-xiii. (Descriptions of *Myiarchus brevipennis* and *Strix flammea bargei* from Curaçao.)
1893. HARTERT, E. On the Birds of the Islands of Aruba, Curaçao, and Bonaire. Ibis, 1893, pp. 311-326.
1893. HARTERT, E. Bull. Brit. Orn. Club, Vol. I, No. vii, 1893, p. xxxvii. (Description of *Euethia sharpei*.)
1895. ROBINSON, W. A flying Trip to the Tropics, a Record of an Ornithological Visit to Colombia and Curaçao, 1 vol., Cambridge, U. S. A., 1895.
1902. HARTERT, E. Die mit Sicherheit festgestellten Vögel der Inseln Aruba, Curaçao und Bonaire. Novitates Zoologicae, Vol. IX, 1902, pp. 295-309.

BIRDS OF CURAÇAO.

Family **Laridæ.****Larus atricilla** Linn.

Recorded by Hartert (Ibis, 1893, p. 326).

Sterna maxima Bodd.

Recorded by Hartert (Ibis, 1893, p. 326).

Sterna hirundo Linn.

Hartert (Ibis, 1893, p. 326); not taken by Dearborn.

Family **Pelecanidæ.****Pelecanus occidentalis** Linn.

Pelecanus fuscus, Hartert, Ibis, 1893, p. 326.

Family **Fregatidæ.****Fregata aquila** (Linn.).

Hartert, Ibis, 1893, p. 326.

Family **Ardeidæ.**

Ardea herodias *Linn.*

A bird of this species was taken by Messrs. Benedict and Nye on Curaçao. (Ridgway, Proc. U. S. Nat. Mus., 1884, p. 177.)

Egretta candidissima (*Gmel.*).

Hartert states: "White Herons are of irregular occurrence on Curaçao, and as I shot *A. candidissima* on Aruba, I suppose that they belong to this species." (Ibis, 1893, p. 325.)

Butorides virescens (*Linn.*).

Recorded by Hartert (Ibis, 1903, p. 325); not taken by Dearborn.

Family **Recurvirostridæ.**

Himantopus mexicanus (*Müll.*).

Not taken by Dearborn. Hartert states, "Flocks of old and young of this Stilt were seen in June on the lagoon of Savonet." (Ibis, 1893, p. 325.)

Family **Scolopacidæ.**

Helodromas solitarius (*Wils.*).

A male bird of this species was taken by Dr. Dearborn, March 25, 1908.

Actitis macularia (*Linn.*).

Recorded by Robinson and Hartert; not taken by Dearborn.

Family **Hæmatopodidæ.**

Hæmatopus palliatus *Temm.*

Recorded by Hartert. (Ibis, 1893, p. 325.)

Family **Odontophoridæ.**

Eupsychortyx cristatus (*Linn.*).

7 specimens, 4 ♂, 3 ♀.

Family **Columbidaë.****Columba gymnoptalma** *Temm.*

1 adult female taken; others seen. "Iris, orange brown; bill, pink; feet, red." (Dearborn.)

Zenaida vinaceo-rufa *Ridgw.*

5 specimens, 3 ♂, 2 ♀. "Iris, dark brown; bill, black; feet, red." (Dearborn.)

Chæmepelia passerina perpallida (*Hartert*).

7 specimens, 5 ♂, 2 ♀. "Iris, brown; bill, orange at base. dusky at tip; feet, red." (Dearborn.)

Family **Falconidaë.****Buteo albicaudatus colonus** *Berlep.*

Type from Curaçao. (Berlepsch, J. f. O., 1892, p. 91.) It was not taken by Dr. Dearborn.

Falco sparverius brevipennis (*Berlep.*).

12 specimens, 7 ♂, 5 ♀, in which the characters described by Berlepsch seem fairly constant. "Iris, dark brown; bill, horn-blue; feet, yellow." (Dearborn.) The measurements are as follows:

♂	wing,	6.50;	tail,	5.	;	tarsus,	1.35
♂	"	6.50;	"	5.	;	"	1.30
♂	"	6.45;	"	5.	;	"	1.30
♂	"	6.55;	"	4.90;	"	"	1.35
♂	"	6.50;	"	5.	;	"	1.30
♂	"	6.40;	"	4.90;	"	"	1.35
♂	"	6.60;	"	4.95;	"	"	1.38
♀	"	7.	;	5.10;	"	"	1.30
♀	"	6.95;	"	5.20;	"	"	1.35
♀	"	7.	;	5.10;	"	"	1.30
♀	"	7.10;	"	5.40;	"	"	1.40
♀	"	6.95;	"	5.25;	"	"	1.37

Polyborus cheriway (*Jacq.*).

Given by Hartert as "not rare" (Ibis, 1893, p. 321); not taken by Dearborn.

Family **Aluconidæ.**

Aluco pratincola bargei (Hartert).

Strix flammea bargei Hartert, Bull. Brit. Orn. Club, No. iii, 1892, p. xiii. *Id.* Ibis, 1893, p. 124.

Dr. Dearborn was unable to procure a specimen of this Owl. Mr. Hartert considers it "not very rare in some of the rocky parts of Curaçao" (Ibis, 1893, p. 322).

Family **Psittacidæ.**

Conurus pertinax (Linn.).

8 specimens of this well-marked species were taken, 4 ♂, 4 ♀. It is found throughout the island; but is more common in the western part. Hartert states, "The nests are mostly built in the large ants'-nests placed in trees, into which they dig holes." (Ibis, 1893, p. 320.) Specimens from St. Thomas agree very well with birds from this island except in most cases the St. Thomas bird has the sides of the head slightly darker orange, and the outer webs of third and fourth primaries are as a rule more distinctly green.

So far as known, no species of *Amazona* occurs on Curaçao.

Family **Cuculidæ.**

Crotophaga sulcirostris Swains.

2 specimens, both females.

Family **Caprimulgidæ.**

Stenopsis cayennensis (Gmel.).

Dr. Dearborn did not find this species on Curaçao, but Mr. Hartert obtained a female and two young birds. (Ibis, 1893, p. 319.)

Family **Trochilidæ.**

Chrysolampis mosquitus (Linn.).

1 specimen, ♂.

Chlorostilbon caribæus Lawr.

14 specimens, 6 ♂, 8 ♀.

Family **Tyrannidæ.****Tyrannus dominicensis** (*Gmel.*).

7 specimens, 5 ♂, 2 ♀.

Tyrannus melancholicus satrapa (*Cab. & Heine*).

A female killed by Dr. Dearborn, March 1, 1908; not previously recorded from Curaçao.

Myiarchus tyrannulus brevipennis (*Hartert*).

Two specimens taken, a male and a female.

Sublegatus glaber *Scl. & Salv.*

Two specimens, both males; not rare.

Elænia martinica riisii (*Sclater*).

1 specimen, ♀. Although only one bird of this species was procured by Dr. Dearborn, it is apparently not uncommon on Curaçao, as both Mr. Hartert and Herr Peters obtained specimens.

Family **Icteridæ.****Icterus icterus ridgwayi** (*Hartert*).

Xanthornus icterus ridgwayi Hartert, *Novitates Zoologicae*, Vol. IX, 1902, p. 299.

Seen on several occasions by Dr. Dearborn, but none was taken. Mr. Hartert found it "not numerous" and states that the colors of Curaçao specimens were very bright. (*Ibis*, 1893, p. 317.)

Icterus xanthornus curasoensis (*Ridgw.*).

7 specimens, 3 ♂, 4 ♀.

Family **Fringillidæ.****Brachyospiza capensis insularis** *Ridgw.*

Zonotrichia pileata Berl., *Journ. für Orn.*, 1892, p. 82.

A good series of 21 specimens, 13 ♂, 8 ♀, were taken by Dr. Dearborn.

Ammodramus savannarum caribæus (*Hartert*).

Coturniculus savannarum caribæus Hartert, *Novitates Zoologicae*, Vol. IX, 1902, p. 298.

Not taken by Dearborn. Hartert states he found it abundant in a stony valley covered with high grass and bushes at Beekenburg, Curaçao. He describes it as differing from *A. savannarum* in being smaller, the bill decidedly smaller. The upper head, which is divided in the middle by a cream colored line, is not so blackish, but more brownish (translation). The type is from Bonaire.

Tiaris sharpei (*Hartert*.)

Euetheia sharpei Hartert, *Bull. Brit. Orn. Club*, Vol. I, 1893, p. xxxvii. *Id. Ibis*, 1893, p. 314.

23 specimens, 11 ♂, 12 ♀.

Family **Hirundinidæ**.

Hirundo erythrogastra *Bodd*.

Dr. Dearborn observed what he believed to be this species at Curaçao.

Family **Cœrebidæ**.

Cœreba uropygialis *Berlep*.

12 specimens, 10 ♂, 2 ♀; common. "Corners of mouth, red." (Dearborn).

Family **Mniotiltidæ**.

Dendroica ruficapilla rufopileata *Ridgw*.

16 specimens, 8 ♂, 8 ♀; common.

Family **Mimidæ**.

Mimus gilvus rostratus *Ridgw*.

9 specimens, 6 ♂, 3 ♀.

BONAIRE ISLAND.

The Island of Bonaire or "Buen Ayre" is of irregular shape, 24 miles long and from 3 to 4½ miles in width. It is situated some 50 miles north of Venezuela and about 30 miles east of Curaçao. In

formation and vegetation it resembles the latter. Mr. Ferry spent 6 days on this island, May 16 to 21, 1908; and a single day, January 18, during his second visit to these islands in 1909.

ORNITHOLOGICAL BIBLIOGRAPHY.

1892. HARTERT, E. Bull. Brit. Orn. Club, Vol. I, 1892, p. xiii.
(Description of *Chrysotis rothschildi* from Bonaire.)
1893. HARTERT, E. (Description of *Chrysotis rothschildi*). Ibis, 1893, p. 123.
1893. HARTERT, E. On the Birds of the Islands of Aruba, Curaçao, and Bonaire. Ibis, 1893, pp. 311-326.
1902. HARTERT, E. Die mit Sicherheit Festgestellten, Vögel der Inseln Aruba, Curaçao, and Bonaire. Novitates Zoologicae, Vol. IX, 1902, pp. 295-309.

BIRDS OF BONAIRE.

While on Bonaire Mr. Ferry devoted nearly all his time to the land birds and took but two specimens of water birds, *Totanus melanoleucus* and *Totanus flavipes*. The following additional species are recorded from the island by Mr. Hartert (Ibis, 1893, pp. 334-337.):

- Larus atricilla** Linn.
- Sterna maxima** Bodd.
- Sterna hirundo** Linn.
- Sterna antillarum** (Less.).
- Pelecanus occidentalis** Linn.
- Fregata aquila** (Linn.).
- Phœnicopterus** sp. (?)
- Egretta candidissima** (Gmel.).
- Hydranassa tricolor** (Müll.).*
- Butorides virescens** (Linn.).
- Himantopus mexicanus** (Müll.).
- Pisobia minutilla** (Vieill.).
- Totanus melanoleucus** (Gmel.).
1 specimen, ♂, taken by Mr. Ferry.
- Totanus flavipes** (Gmel.).
1 specimen, ♂, taken by Mr. Ferry.
- Ægialitis collaris** (Vieill.).
Hartert, *id.*, p. 335.

* Regarding the occurrence of this species, see remarks under Aruba., p. 196.

Ochthodromus wilsonius rufinuchus (*Ridgw.*).*Ægialitis rufinucha* Hartert, *Ibis*, 1893, p. 335.*Ægialitis wilsonius rufinucha* Hartert, *Novitates Zoologicae*, Vol. IX, 1902, p. 307.Family **Columbidae**.**Columba gymnophthalma** *Temm.*

3 specimens, 2 ♂, 1 ♀

Columba portoricensis *Temm.**Columba corensis* of authors.

1 specimen. According to Mr. Ferry, while this species is not uncommon, it is shy. Mr. Hartert states, "I met with this Pigeon only among the rocks on Bonaire, where it is fairly common near Fontein. The bill is of a dark blood-red color, horn-white at the tip. The iris consists of two rings, the outer one crimson, the inner one yellow. The naked papillose space around the eye is *yellow*, not red." (*Ibis*, 1893, p. 333.)

Leptotila verreauxi (*Bonap.*).

2 specimens, 1 ♂, 1 ♀.

Zenaida vinaceo-rufa *Ridgw.*

10 specimens, 7 ♂, 3 ♀.

Chæmepelia passerina perpallida (*Hartert*).

10 specimens, 5 ♂, 5 ♀; very common.

Family **Falconidae**.**Buteo albicaudatus colonus** *Berlep.*

Not taken by Mr. Ferry; given by Hartert as "rare on Bonaire." (*Ibis*, 1893, p. 332.)

Falco sparverius brevipennis *Berlep.*

Not taken by Mr. Ferry. Mr. Hartert states it is "very rare on Bonaire." (*Ibis*, 1893, p. 332.)

Polyborus cheriway (*Jacq.*).

One specimen, ♂, taken by Mr. Ferry; others seen.

Family **Psittacidae.****Amazona ochroptera rothschildi** (Hartert).

Chrysolis rothschildi Hartert, Bull. Brit. Orn. Club, No. III, 1892, p. xii. *Id.* Ibis, 1893, p. 123. *Id.* Ibis, 1893, p. 328.

Mr. Ferry was unable to procure a specimen of this fine Parrot during his stay on Aruba, so I am unable to compare specimens from the type locality with the series in this Museum from Blanquilla Island; but Mr. Lowe (Ibis, 1909, p. 330) considers the Blanquilla bird to be *rothschildi*, having compared his specimens from that island with a series from Aruba including the type.

According to Hartert's description (Ibis, 1893, p. 328) *A. rothschildi* differs from *A. ochroptera* mainly in having only the anterior part of the crown, the space around the eyes, and the ear coverts yellow, and the green color of the throat reaches nearly or quite to the lower mandible on sides of chin; the chin and throat are not yellow as in *ochroptera*. In *rothschildi* the cubital edge of the wing is largely bright scarlet, while in *ochroptera* it is yellow, with only a few scattered red feathers near the body. The rump and abdomen in *rothschildi* show less or no blackish edges to the feathers and the abdomen is less distinctly tinged with blue.

The measurements of 7 adult specimens given by Hartert are as follows:

Males, wing, 8 to 8.05; tail, 4.9 to 5.4; culmen, 1.26 to 1.4; height upper mand. at base, .59 to .65.

Females, wing, 7.80 to 8.30; tail, 5.1 to 5.3; culmen, 1.26 to 1.4; height upper mand. at base, .55 to .60.

For further remarks concerning this species see under Blanquilla and Margarita (pp. 223, 242).

Conurus xanthogenius Bonap.

13 specimens, 6 ♂, 7 ♀.

Mr. Ferry informs me that this species is common on Bonaire. The golden yellow crown will always distinguish adult birds in full plumage from *C. pertinax*, and when compared in series it will be noticed that the green of the upper parts is slightly darker. There is much variation in the amount of yellow on the crown, probably due to age and season. One male has a perfect yellow crown, others, both males and females, have the crown yellow with a few green feathers, the crown green with a few yellow feathers, and

two specimens (a male and a female) have the crown entirely green without yellow and showing only a trace of orange yellow on the forehead.

Family **Caprimulgidæ.**

Stenopsis cayennensis (*Gmel.*).

Not taken by Mr. Ferry on Aruba. "Breeds on Curaçao and Bonaire." (Hartert, *Ibis*, 1893, p. 319.)

Family **Trochilidæ.**

Chrysolampis mosquitus (*Linn.*).

7 specimens, 4 ♂, 3 ♀.

Chlorostilbon caribæus *Lawr.*

3 specimens, 1 ♂, 2 ♀.

Family **Tyrannidæ.**

Tyrannus dominicensis (*Gmel.*).

7 specimens, 4 ♂, 3 ♀; common.

Myiarchus tyrannulus brevipennis (Hartert).

1 specimen, ♀.

Mr. Hartert states it is "Not very rare near Savônet and in other well wooded places." (*Ibis*, 1893, p. 318.)

Sublegatus glaber *Scl. & Salv.*

14 specimens, 10 ♂, 4 ♀.

Mr. Ferry found this species common in wooded localities.

Elænia martinica riisii (*Sclater*).

3 specimens, 2 ♂, 1 ♀.

Family **Icteridæ.**

Icterus xanthornus curasoensis (*Ridgw.*).

2 specimens, both females, which apparently do not differ from specimens from Curaçao.

Family **Fringillidæ.****Ammodramus savannarum caribæus** (*Hartert*).

Mr. Ferry obtained a single specimen of this form, the type of which came from this island. Mr. Hartert found it abundant in high grass on Mr. Hatchett's plantation. (*Novitates Zoologicae*, Vol. IX, 1902, p. 298.) See remarks regarding this form under Curaçao.

Tiaris sharpei (*Hartert*).

Euetheia sharpei Hartert, Bull. Brit. Orn. Club, Vol. I, No. VII, 1893, p. xxxvii, *Id.* Ibis, 1893, p. 328.

12 specimens, 8 ♂, 4 ♀.

Family **Cœrebidæ.****Cœreba uropygialis** *Berlep*.

18 specimens, 10 ♂, 8 ♀.

Family **Vireonidæ.****Vireosylva chivi agilis** (*Licht.*).

A single female specimen of this Vireo was taken January 19, 1909. It had not been previously taken on Bonaire.

Family **Mniotiltidæ.****Dendroica ruficapilla rufopileata** *Ridgw.*

14 specimens, 8 ♂, 6 ♀.

Family **Mimidæ.****Mimus gilvus rostratus** *Ridgw.*

11 specimens, 6 ♂, 5 ♀.

Margarops fuscatus (*Vieill.*).

Margarops fuscatus Hartert, Ibis, 1893, p. 327.

Mr. Hartert found this West Indian species common in the gardens near Fontein on Bonaire, and states that he was unable to distinguish his specimens from those from the Bahamas, Haiti, Porto Rico, and St. Thomas. It is interesting to note that Mr. Lowe has since taken it on Los Hermanos. It was not observed by Mr. Ferry.

ISLAS DE AVES.

These islands are situated about 30 miles southeast of Bonaire and consist of two groups of low cays called Ave de Sotavento and Ave de Barlovento. The largest island is about $3\frac{1}{2}$ miles long, being fringed in places with mangroves and having a scant growth of grass and low bushes in the interior. Mr. Ferry visited Ave de Barlovento, the eastern group, and remained there two days, January 23 and 24, 1909. As far as I am able to learn this island had not previously been visited by a collector.

Family **Sulidae**.***Sula leucogastra*** (Bodd.).

Sula sula of authors.

3 specimens, 2 ♂, 1 ♀.

Mr. Ferry found this species common; seventy-five eggs were taken, nearly all of which were quite fresh.

Family **Ardeidae**.***Nyctanassa violacea*** (Linn.).

One female taken January 23.

Family **Scolopacidae**.***Numenius hudsonicus*** Lath.

1 specimen, ♀, January 23, 1909.

Totanus flavipes (Gmel.).

One seen but not taken.

Family **Charadriidae**.***Ochthodromus wilsonius rufinuchus*** (Ridgw.).

1 specimen, ♂; others seen.

Family **Aphrizidae**.***Arenaria interpres morinella*** (Linn.).

1 specimen, ♂.

Family **Mniotiltidæ.****Dendroica ruficapilla rufopileata** *Ridgw.*

7 specimens. 3 ♂, 4 ♀; common.

LOS ROQUES ISLANDS.

A group of small cays, situated about 30 miles east of Islas de Aves. They are all low, with the exception of El Roque, where the limestone hills rise to an altitude of several hundred feet.

"The vegetation is principally mangroves, cacti, and dwarf trees, and there is an extensive wooded swamp at the eastern end of the island." (Ferry.) I find no evidence of this island having been previously visited by a collector. Mr. Ferry's stay in this locality was from January 25 to 29, 1909.

Family **Laridæ.****Sterna maxima** *Bodd.*

1 specimen, ♂.

Family **Pelecanidæ.****Pelecanus occidentalis** *Linn.*

Mr. Ferry found this species common, but specimens were not taken.

Family **Fregatidæ.****Fregata aquila** (*Linn.*).

Seen on several occasions, but no specimens were taken in this locality.

Family **Phœnicopteridæ.****Phœnicopterus ruber** *Linn.*

6 specimens, 4 ♂, 2 ♀.

"Flamingoes were common here, 25 to 30 being seen in one flock, but no signs of nests were seen in this island (El Roque). We heard of a large nesting ground in another portion of Los Roques group." (Ferry.)

Family **Ardeidae**.

Ardea herodias *Linn.*

1 specimen, ♀.

Dichromanassa rufescens (*Gmel.*).

2 specimens, both females, one in white plumage; a number seen and, according to Mr. Ferry, the white and gray phases were about equally common.

Butorides virescens robinsoni (*Richmond*).

1 specimen, ♀, which I provisionally refer to this form.

Family **Recurvirostridae**.

Himantopus mexicanus (*Müll.*).

1 specimen, ♀.

Family **Charadriidae**.

Ægialitis semipalmata *Bonap.*

1 specimen, Jan. 26, 1909.

The following species of shore birds were seen by Mr. Ferry, but no specimens were taken in this locality:

Calidris leucophæa (*Pallas*).

Totanus melanoleucus (*Gmel.*).

Totanus flavipes (*Gmel.*).

Helodromas solitarius (*Wils.*).

Squatarola squatarola (*Linn.*).

Arenaria interpres morinella (*Linn.*).

Hæmatopus palliatus *Temm.*

Only five species of land birds were taken by Mr. Ferry in this group of islands; two are apparently new.

Family **Tyrannidae**.

Myiorchus tyrannulus brevipennis (*Hartert*).

1 specimen, ♂.

Sublegatus glaber *ScL. & Salv.*

6 specimens, 1 ♂, 5 ♀.

Family **Cœrebidæ.****Cœreba lowii** *sp. nov.*

Type No. 36896, Field Museum of Natural History (Los Roques).

Adult male: Whole of head and throat black; under parts dark olive green, showing a tinge of gray on the lower abdomen; under tail coverts dark gray; back sooty gray or dull grayish black, not clear black like the crown; rump dark olive green; wings and tail similar to *C. wellsi*.

Length (skin), 4.10 in. (104 mm.); wing, 2.40 in. (60.8 mm.); bill, .55 in. (14 mm.); tarsus, .70 in. (17.80 mm.).

This species is similar to *Cœreba wellsi*, but differs in having the back distinctly more gray than the crown, not uniform as in *wellsi*, and the under parts more decidedly olive green. In the four specimens taken the dried skins show every indication of a tumid rictus, which does not show at all in specimens of *C. lauræ* from Los Testigos, but the color has, of course, faded out, and unfortunately Mr. Ferry made no notes as to the color of the rictus in life; he informs me, however, that he thinks it was red. I have named it in honor of Mr. Percy R. Lowe, the well known English ornithologist.

Family **Mniotiltidæ.****Seiurus noveboracensis** (*Gmel.*).

1 specimen, ♂, taken January 27, 1909.

Dendroica ruficapilla obscura *subsp. nov.*

Type No. 37255, Field Museum of Natural History (Los Roques).

Adult male: Crown dark chestnut, nearly as dark as in *D. r. capitalis* from Barbados; back and upper parts dark olive green, some of the feathers on the back with a dark shaft line; rump slightly more yellow than the back, but not so bright as in *D. r. rufopileata*; under parts deep yellow; throat and breast streaked with orange brown; secondaries and tertials edged with greenish yellow; otherwise similar to *D. r. rufopileata* except in size.

Wing, 2.50; tail, 2.15; bill, .38; tarsus, .88.

This form is similar to *D. r. rufopileata*, but is decidedly larger and has the back and rump darker olive. The crown is slightly darker chestnut and the under parts deeper yellow; the edgings of the secondaries and tertials are more greenish yellow. The female is larger and somewhat darker above.

24 specimens of this apparently well-marked form were taken. 12 males and 12 females.

The comparative measurements of the two forms are as follows:

D. r. obscura, Los Roques.

12 males; wing, 2.35 to 2.54; tail, 2 to 2.25; bill, .36 to .40.

D. r. rufopileata from Aruba, Curaçao, and Bonaire.

20 females; wing, 2.23 to 2.37; tail, 1.78 to 1.90; bill, .33 to .37.

ORCHILLA ISLAND.

Orchilla Island is situated about 15 miles east of Los Roques and 73 miles north of Cape Codera, Venezuela. It is approximately $7\frac{1}{2}$ miles long and about one mile broad. The interior of the island is high and largely barren, consisting of seven hills separated by low valleys. What vegetation there is consists principally of low bushes, together with cacti of several species, and mangroves are found along the shores. Mr. Ferry's stay on Orchilla was limited to three days, January 30 to February 1, 1909. In his notes he states that birds were comparatively scarce and confined to few species. Besides those recorded below the following species were given as not uncommon: *Pelecanus occidentalis*, *Fregata aquila*, and *Phænicopterus ruber*. So far as known, no collector had previously visited this island.

Family Columbidae.

Chæmepelia passerina perpallida (Hartert).

10 specimens, 6 ♂, 4 ♀; common.

Family Mniotiltidae.

Dendroica ruficapilla rufopileata Ridgw.

7 specimens, 4 ♂, 3 ♀.

"Common. Found a nest of this species containing 3 half-fledged young, also a young of the year dangling by a leg in a cobweb." (Ferry.)

Birds from Orchilla, Blanquilla, Tortuga, Testigos, and probably Margarita differ somewhat from *D. r. rufopileata* from Caracas and Bonaire, and those from Blanquilla and Tortuga have the wings and tail shorter. The yellow colors are brighter, especially the yellow edgings of the secondaries and tertials, which are also broader.

The crown in birds from Testigos, Blanquilla, and Tortuga is fully as dark as in *D. r. capitalis* from Barbados, but the orange-brown streaks on the under parts are narrower and more restricted than in that form. While it is probable that these birds represent fairly good insula forms and are worthy of subspecific recognition, I do not feel it is desirable to separate them, for the present at least, and have referred them all provisionally to *rufopileata*.

The comparative measurements of birds from the different islands are as follows:

ISLAS DE AVES: 3 specimens (males); wing, 2.25 to 2.37; tail, 1.80 to 1.85; bill, .33 to .37. Apparently intermediate between *rufopileata* and *obscura*.

ARUBA, CURAÇAO, AND BONAIRE: 20 specimens (males); wing, 2.23 to 2.37; tail, 1.78 to 1.90; bill, .33 to .37.

ORCHILLA: 4 specimens (males); wing, 2.24 to 2.35; tail, 1.82 to 1.88; bill, .35 to .37.

BLANQUILLA: 7 specimens (males); wing, 2.15 to 2.27; tail, 1.85 to 1.95; bill, .35 to .37.

TORTUGA: 4 specimens (males); wing, 2.20 to 2.26; tail, 1.80 to 1.90; bill, .35 to .38.

TESTIGOS: 5 specimens (males); wing, 2.24 to 2.32; tail, 1.83 to 1.90; bill, .35 to .38.

Family Mimidae.

Mimus gilvus rostratus Ridgw.

8 specimens, 4 ♂, 3 ♀, 1 ?

TORTUGA ISLAND.

The Island of Tortuga is situated 42 miles northeast of Cape Codera, Venezuela, and about 48 miles west of Margarita, and is about 12 miles long by 5 miles broad at its widest part. It is about 100 feet high at the eastern end, while the western part is low. The vegetation in the interior is scattered, being principally cacti of several species. Mr. Ferry writes: "Bird life is abundant here. The western portion of the island is lower and more plain-like and more sparsely covered with vegetation than the eastern part. There is a heavy mangrove forest on the southeastern side where a colony of Brown Peleicans nest."

Mr. Ferry reached Tortuga, February 2, and left February 4, 1909, remaining there less than three days. No collector had previously visited the island and nothing was known regarding its fauna. The results obtained in such a limited time would indicate that it is worthy of further investigation.

Family **Pelecanidæ.**

Pelecanus occidentalis (*Linn.*).

Common. No specimens were taken but Mr. Ferry found a large colony nesting among the mangroves on the southeastern part of the island. Most of the nests contained young birds varying in size.

Family **Fregatidæ.**

Fregata aquila (*Linn.*).

A number seen but none taken; "common" (Ferry).

Family **Columbidæ.**

Chæmpelia passerina perpallida (*Hartert*).

1 specimen, ♀, which apparently does not differ from those from Margarita.

Family **Psittacidæ.**

Conurus æruginosus tortugensis *subsp. nov.*

Type 36976, Field Museum of Natural History (Tortuga Island).

Adult male: Similar to *Conurus æruginosus* but differs in having decidedly more orange yellow on sides of head; the throat and sides of head below the orange patch paler (about the same color as *arubensis*); the under wing coverts more yellowish green, and the wings and tail longer.

Length (skin), about 10.25; wing, 5.65; tail, 5.50; bill, .80; tarsus, .43. (The measurements are in inches.)

Mr. Ferry procured 28 specimens of this interesting bird, the measurements of which are as follows:

8 males, wing, 5.65 to 5.85 — average 5.70 in. (144.8 mm.); tail, 5.45 to 5.40 — average 5.50 in. (139.7 mm.).

20 females, wing, 5.50 to 5.80 — average 5.55 in. (141 mm.); tail, 5.45 to 5.80 — average 5.60 in. (142.25 mm.).

Family **Trochilidæ.****Doleromya pallida** *Richmond.*

4 specimens, 3 ♂, 1 ♀, which apparently do not differ from specimens from Margarita.

Chrysolampis mosquitus (*Linn.*).

2 specimens, 1 ♀, 1 ?.

Family **Fringillidæ.****Tiaris tortugensis** *sp. nov.*

Type No. 36977, Field Museum of Natural History (Tortuga Island).

Adult male: Forehead and about half of crown blackish, gradually shading into olive gray, the black extending more on the crown than in *T. sharpei*; sides of head and whole throat and breast black; abdomen gray, the black of the breast ending rather abruptly; back olive gray, paler than *sharpei*; under wing coverts gray with no tinge of olive; otherwise resembles *T. sharpei*.

Wing, 2.14; tail, 1.75; bill, .40; tarsus, .62.

Female: Above ash gray with hardly a trace of olive, paler than *sharpei*; under parts shading from very pale brownish ashy on the throat to ashy white on the belly.

Nine specimens of this supposed new form, 8 males and 1 female, were taken. Mr. Ferry states that it was common and nesting.

Family **Cærebidæ.**

Mr. John F. Ferry procured a series of 11 specimens of a well marked new species of *Cæreba* on Tortuga, which I have given his name.

Cæreba ferryi *sp. nov.*

Type No. 36997, Field Museum of Natural History (Tortuga Island, February 2, 1909).

Male: Similar in size and coloration to specimens of *C. luteola* from Margarita and coast of Venezuela, but differs in having the entire forehead and front of crown white and the secondaries and tertials narrowly tipped with white. In the type the frontal white patch extends upon the crown at least .30 in. from base of upper

mandible, and in none of the series (8 males, 3 females) is the white forehead less than .15 in. in width.

Length (skin), 3.75 in. (95.2 mm.); wing, 2.25 in. (57.2 mm.); tail, 1.75 in. (44.4 mm.); culmen, .38 in. (9.6 mm.).

According to Mr. Ferry, the species is common on the island. Many nests were found, but all were empty.

Family **Mniotiltidæ.**

***Dendroica ruficapilla rufipileata* Ridgw.**

4 specimens, all males; common.

Family **Mimidæ.**

***Mimus gilvus* (Vieill.).**

15 specimens, 11 ♂, 4 ♀; common.

Specimens from Tortuga vary in size of bill and coloration and are apparently intermediate between *gilvus* and *rostratus*, and might equally well be referred to either. For convenience I have considered birds from Tortuga and Margarita to be *gilvus*.

BLANQUILLA ISLAND.

The Island of Blanquilla, or Blanca, as it is sometimes called, is situated about 40 miles north of Margarita and 85 miles east of Orchilla. It is six miles long and about three miles broad at its widest part. The interior of the island is broken with ravines, most of them wooded. There is a considerable growth of trees on the western end and some groves of palms. Large areas are covered with grass.

"A Venezuelan leases the island and conducts a goat ranch. About his estate we found all the land birds occurring on the island except the large parrot. Vegetation is far more luxuriant and vigorous on this island than on any previously visited, although it is still of a semi-arid character." (Ferry.)

This island had previously been visited by Mr. Percy R. Lowe, who has published the following papers concerning its ave fauna: 1906. Bull. Brit. Orn. Club, Vol. XIX, 1906, p. 6. (Description of

Euethia johnstonei.)

1907. On the Birds of Blanquilla Island, Venezuela. Ibis, 1907, p. 111.

1909. Notes on some Birds collected during a Cruise in the Caribbean Sea. Ibis, 1909, p. 330.

Mr. Ferry remained on Blanquilla two days, February 6-7, 1909.

Family **Pelecanidæ.**

Pelecanus occidentalis *Linn.*

Common; no specimens taken. (Ferry.)

Family **Fregatidæ.**

Fregata aquila (*Linn.*).

Common, but no specimens taken. (Ferry.)

Family **Ardeidæ.**

Butorides virescens robinsoni (*Richmond*).

Recorded by Mr. Lowe (Ibis, 1903, p. 117); not taken by Mr. Ferry.

Family **Columbidæ.**

Chæmepelia passerina perpallida (*Hartert*).

7 specimens, 5 ♂, 2 ♀; common.

Mr. Lowe states: "The bill of the bird varies from orange and orange yellow to yellow at the base. In some females the bill is almost entirely black." (Ibis, 1907, p. 115.)

Family **Psittacidæ.**

Amazona ochroptera rothschildi (*Hartert*).

10 specimens, 8 ♂, 2 ♀.

I have followed Mr. Lowe in considering the Blanquilla Parrot to be *rothschildi*, as he has compared his specimens with the type from Bonaire (Ibis, 1909, p. 330), but in the series before me none of the characters given as distinguishing that species are constant, and no two specimens exactly agree as to the markings, although they were all taken at practically the same time. Some specimens have the yellow throat, while in others it is entirely absent; still others have a little yellow on the chin. The greenish bar on sides of chin,

extending to the lower mandible, is also very variable, being clearly marked in some and absent in others; *one specimen has green on one side and yellow on the other*. The amount of scarlet red on the cubital edge of the wing is also variable, and to further complicate matters I cannot separate Blanquilla specimens from those from Margarita, where it is claimed *A. ochroptera* occurs. All of the specimens from Blanquilla and Margarita have the forehead whitish, shading into bright yellow on the crown and having the concealed basal portion of the feathers salmon-red. Two specimens have a few scattered bluish feathers mixed with the yellowish white on the forehead.

Compared with the few specimens of supposed *ochroptera* from Aruba and the mainland, which I have examined, the Blanquilla and Margarita birds differ sufficiently to entitle them to at least sub-specific recognition, but all these differences may be due to age, a matter that can only be decided by comparison with a good series of *ochroptera* in various stages of plumage. Furthermore, should the characters given *rothschildi* prove constant and the Bonaire bird never assume the yellow throat, etc., the Blanquilla and Margarita birds (assuming that they prove different from *ochroptera*) will require a new name; but for the present, at least, and until sufficient material is available to definitely settle the matter, it would seem best to assume that the Bonaire bird *does* occasionally assume a yellow throat and is not separable from birds from Blanquilla and Margarita.

Mr. Ferry writes: "These birds were common in a grove on the westerly end of Blanquilla, and according to the natives it is found on no other part of the island."

Family **Alcedinidæ**.

Ceryle alcyon (*Linn.*).

Recorded by Mr. Lowe (*Ibis*, 1909, p. 317). It was not observed by Mr. Ferry.

Family **Trochilidæ**.

Chrysolampis mosquitus (*Linn.*).

2 specimens, 1 ♀, 1 ?

Doleromya pallida *Richmond*.

4 specimens, 3 ♂, 1 ?

Cannot be distinguished from specimens from Margarita.

Family **Tyrannidæ.****Tyrannus dominicensis** (*Gmel.*).

Recorded by Mr. Lowe (*Ibis*, 1909, p. 330); not taken by Mr. Ferry.

Myiarchus tyrannulus brevipennis (*Hartert*).

Recorded by Mr. Lowe (*Ibis*, 1909, p. 330); not taken by Mr. Ferry.

Family **Fringillidæ.****Tiaris johnstonei** (*Lowe*).

Euethia johnstonei Lowe, Bull. Brit. Orn. Club, Vol. XIX, 1906, p. 6. *Id.* *Ibis*, 1907, p. 120.

6 specimens, 3 ♂, 3 ♀. The characters described by Mr. Lowe seem constant.

Family **Mniotiltidæ.****Dendroica ruficapilla rufopileata** *Ridgw.*

11 specimens, 7 ♂, 2 ♀, 2 ?; common.

See remarks regarding these birds under Orchilla, page 218.

Family **Mimidæ.****Mimus gilvus rostratus** *Ridgw.*

7 specimens, 3 ♂, 3 ♀, 1 ?

Blanquilla specimens appear to be intermediate between *gilvus* and *rostratus*.

LOS HERMANOS ISLANDS.

A group of seven islands situated about ten miles east of Blanquilla and 45 miles north of the northwest point of Margarita Island. The largest is Orquilla, which rises to a height of 650 feet. Vegetation consists of cacti, agaves, coarse grass and mangroves. Mr. Ferry remained but one day on Orquilla (February 8, 1909) and found land birds confined to a few species, but he writes that sea birds nest there in great numbers, principally Terns and Gannets. These islands had been previously visited by Mr. P. R. Lowe, the results of his investigations being given in his paper, "Notes on some Birds collected during a Cruise in the Caribbean Sea." (*Ibis*, 1909, p. 323.)

Family **Laridæ.****Sterna fuliginosa** *Gmel.*

2 specimens taken, 1 ♂, 1 ♀.

Mr. Ferry found this species breeding in large numbers at the time of his visit (February 8).

Anous stolidus (*Linn.*).

3 specimens, 2 ♂, 1 ♀ ; breeding.

Family **Phaëthontidæ.****Phaëthon æthereus** *Linn.*

Mr. Ferry found this species common, but did not procure specimens. Mr. Lowe states, "We found numbers of these beautiful birds breeding in holes among the broken masses of rocks which were strewn everywhere on the steep slopes of the island, but not until we reached an altitude of about 300 feet. No attempt at making any sort of nest is made." (*Ibis*, 1909, p. 327.)

Family **Sulidæ.****Sula cyanops** (*Sundev.*).

Mr. Ferry found this species common and breeding. Two specimens were taken, an adult male and female. Mr. P. R. Lowe gives the colors of soft parts of fresh birds as follows: "Tarsi greenish drab; webs and feet dirty yellowish drab. Gular sac of an India ink color; bill greenish yellow; iris yellow." (*Ibis*, 1909, p. 324.)

Sula piscator (*Linn.*).

Mr. Lowe found the Red-footed Booby in greater numbers on this island than either of the other species. He states: "The nest is formed of twigs, grass, and sticks very roughly put together and is ludicrously small in comparison with the size of the bird. It is invariably placed in either mangrove or sea-grape bushes. By far the greater number of nests were occupied by birds in the white-tailed stage of plumage, entirely white birds of the adult stage being very scarce. One egg only is laid." (*Ibis*, 1909, p. 325.)

***Sula leucogastra* (Bodd.).**

Sula sula Lowe, Ibis, 1909, p. 324.

Common. No examples of this species were taken by Mr. Ferry, but Mr. Lowe found it abundant and nesting; he says: "The nests were invariably situated on the bare rocks and lined with a few pieces of grass or twigs. The color of the soft parts of this Gannet were taken on the spot and are as follows: *Tarsi and upper surface of webs* bright chrome yellow; *under surface of webs* greenish yellow; *gular sac* bright chrome yellow; *bill* yellow at base, shading off into bluish gray; *iris* pale gray; *eyelids* edged with bright blue, a patch of dark bluish green immediately in front of the eye." (Ibis, 1909, p. 324.)

Family **Fregatidæ.*****Fregata aquila* (Linn.).**

A number of these birds were seen by Mr. Ferry, but none were taken. Mr. Lowe at the time of his visit found it abundant and breeding on the island and gives some interesting notes concerning its habits. (Ibis, 1909, p. 325.)

Family **Columbidæ.*****Chæmepelia passerina perpallida* (Hartert).**

3 specimens, 2 ♂, 1 ♀.

Family **Falconidæ.*****Falco peregrinus anatum* (Bonap.).**

Recorded by Mr. Lowe. (Ibis, 1909, p. 324.)

Family **Icteridæ.**

Three specimens of an apparently new form of *Holoquiscalus* were taken by Mr. Ferry on Orquilla (Los Hermanos), which I propose to name:

***Holoquiscalus orquillensis* sp. nov.**

Type No. 37090, Field Museum of Natural History (Orquilla).

Adult male: Similar to *H. insularis* from Margarita, but differs in having the middle tail feathers almost plain black, not decidedly

glossed with green as in that species, rest of tail feathers showing a slight greenish gloss, but much less than in *insularis*. The single female taken apparently does not differ from specimens from Margarita.

Wing, 4.70 (118.3 mm.); tail, 4.15 (105 mm.); tarsus, 1.15 (29.2 mm.); exposed culmen, 1.06 (26.7 mm.).

Mr. Ferry informs me that it is common on Orquilla, but whether it is found on other islands of Los Hermanos group he is unable to say, as he did not visit them. He observed no species of *Holoquistalus* on Blanquilla.

Family **Fringillidæ.**

Tiaris johnstonei (*Lowe*).

A single adult male of this species was taken by Mr. Ferry, which apparently does not differ from Blanquilla specimens. Mr. Lowe also procured specimens on this island (Ibis, 1909, p. 328).

Family **Mimidæ.**

Margarops fuscatus (*Vieill.*).

Mr. Ferry did not find this West Indian species either here or on Bonaire. Mr. P. R. Lowe procured three specimens on Orquilla (Los Hermanos) at an altitude of from 400 to 600 feet (Ibis, 1909, p. 328).

TESTIGOS ISLANDS.

Los Testigos are a group of islands situated forty miles from the coast of Venezuela and about fifty miles from Margarita Island. The largest is known as Testigo Grande and is about three miles long and 400 feet or more in height. Mr. Ferry's stay was limited to three days (February 12-14, 1909). He writes that he found these islands far more heavily wooded than any of the others visited, except Margarita. Good-sized trees of several varieties were common, and there was an abundance of bushes and various species of cacti and wild cotton. Snakes and land tortoises were rather common, and also a species of *Lepus*. Mr. P. R. Lowe, who had previously visited these islands, states: "Testigo Grande is thickly wooded and covered with very varied vegetation, in spite of the waterless condition in which we found it. Many of the trees attain quite respectable pro-

portions, and there seemed to me to be an unusual variety. Besides many that were unknown to me, I noticed Logwood, West Indian "Birch," Guaiacum, Acacia, Tamarind, and Manchineel. Various kinds of Cactus grow on the lower slopes and on the smaller islets, and there is a great profusion of flowering bushes and even flowering plants. Wild cotton grows in abundance. * * * Geologically they consist of masses of coarse-grained granite (hornblende), enormous fragments of which, much weathered, may be seen here and there among the surrounding vegetation." (Ibis, 1909, p. 312.) Both Mr. Ferry and Mr. Lowe comment upon the unusual abundance of butterflies.

ORNITHOLOGICAL BIBLIOGRAPHY.

1908. LOWE, P. R. Bull. Brit. Orn. Club, Vol. XXI, 1908, p. 108
(Description of *Cæreba lauræ*).
1909. LOWE, P. R. Notes on some Birds collected during a Cruise
in the Caribbean Sea. Ibis, 1909, p. 312.

Family **Pelecanidæ.**

Pelecanus occidentalis Linn.

Brown Pelicans were seen by Mr. Ferry, but none were taken.

Family **Sulidæ.**

Sula leucogastra (Bodd.).

Sula sula Lowe, Ibis, 1909, p. 315.

Found breeding by Mr. Lowe on the smaller islands in large numbers (l. c.); also noted by Mr. Ferry, but no specimens were taken.

Sula piscator (Linn.).

Mr. Lowe found this Gannet breeding on the smaller islands of the group. (Ibis, 1909, p. 316.) It was also noted by Mr. Ferry.

Family **Fregatidæ.**

Fregata aquila (Linn.).

Mr. Ferry found this species common, but no specimens were taken. At the time of Mr. Lowe's visit to these islands he found it breeding in large numbers.

Family **Ardeidæ.**

Ardea herodias *Linn.*

Mr. Lowe observed several of these Herons on the islands. (Ibis, 1909, p. 315.) It was not taken by Mr. Ferry.

Family **Scolopacidæ.**

Pisobia minutilla (*Vieill.*).

Limonites minutilla Lowe, Ibis, 1909, p. 315.

Recorded as common by Mr. Lowe.

Family **Aphrizidæ.**

Arenaria interpres morinella (*Linn.*).

Several flocks seen by Mr. Lowe on Testigo Grande. (Ibis, 1909, p. 315.)

Family **Hæmatopodidæ.**

Hæmatopus palliatus *Temm.*

A pair seen and one shot by Mr. Lowe. (Ibis, 1909, p. 314.)

Family **Columbidæ.**

Leptotila verreauxi (*Bonap.*).

3 specimens taken by Mr. Ferry, all females.

Chæmepelia passerina perpallida (*Hartert*).

7 specimens taken by Mr. Ferry, 5 ♂, 2 ♀, which seem to agree with those from the other islands. Mr. Lowe states that "the color of the bill at the base varies in both sexes from orange to yellow, according to age." (Ibis, 1909, p. 314.)

Family **Falconidæ.**

Buteo platypterus (*Vieill.*).

Buteo latissimus Lowe, Ibis, 1909, p. 313.

A bird supposed to be of this species was observed by Mr. Lowe.

Family **Strigidae**.

Two unidentified Owls were seen by Mr. Lowe. (Ibis, 1909, p. 313.)

Family **Alcedinidae**.**Ceryle alcyon** (*Linn.*).

Several birds of this species were seen by Mr. Lowe on Testigo Grande. It was not noted by Mr. Ferry.

Family **Trochilidae**.**Chrysolampis mosquitus** (*Linn.*).

Mr. Lowe found this species on one of the smaller islands of the group, but did not observe it on Testigo Grande. (Ibis, 1909, p. 317.)

Family **Tyrannidae**.**Myiarchus tyrannulus** (*Müll.*).

5 specimens taken, 2 ♂, 3 ♀, all of which agree very well in size and coloration with birds from Margarita.

Family **Icteridae**.**Holoquiscalus insularis** (*Richmond*).

18 specimens, 11 ♂, 7 ♀.

I cannot agree with Mr. Lowe in considering the bird which is found on Los Testigos to be *H. luminosus*. While the variation in size and terminal decurvature of the bill is considerable, specimens occur which agree fairly well with *insularis*, and the female is nearer in coloration to that species and may be readily distinguished from females of *H. luminosus* from Grenada, as represented in the series in this Museum. Birds from Testigos Islands seem to be intermediate between *insularis* and *luminosus* and may represent a slightly differentiated form; but it would seem undesirable to cumber ornithological nomenclature with a name based upon slight and apparently inconstant characters.

The measurements of 18 specimens are as follows:

11 males, wing, 4.60 to 4.75; tail, 4.45 to 4.55; culmen, 1.12 to 1.20.

7 females, wing, 4 to 4.10; tail, 3.75 to 3.85; culmen, 1 to 1.08.

Family **Cœrebidæ.**

Cœreba lauræ *Lowe.*

Cœreba lauræ Lowe, Bull. Brit. Orn. Club, Vol. XXI, 1908, p. 108.

11 specimens of this interesting black form of *Cœreba* were taken, 6 ♂, 4 ♀, 1 ?. It is apparently closely allied to *C. wellsi*, but differs, according to Mr. Lowe, "chiefly on account of the fact that the bright crimson and tumid rectus which is so conspicuous an object in the St. Vincent and Grenada birds is in this form entirely absent. The bill is also less curved." (*Ibis*, 1909, p. 320.)

In the specimens before me there is no indication of a soft colored rectus at base of the bill, while it is clearly indicated in dried skins of *C. lowii* from Los Roques.

Family **Mniotiltidæ.**

Dendroica ruficapilla rufopileata *Ridgw.*

7 specimens, 5 ♂, 2 ♀. These birds have the crown patch fully as dark as in *D. capitalis* from Barbados, but the under parts are streaked as in *rufopileata*.

See remarks under *Orchilla*, page 218.

Family **Mimidæ.**

Mimus gilvus rostratus *Ridgw.*

8 specimens, 6 ♂, 2 ♀, which in size of bill and coloration seem to be intermediate between *gilvus* and *rostratus*.

MARGARITA ISLAND.

The Island of Margarita is too well known to warrant more than a brief description in a paper of this character. Lying some seventeen miles from the mainland, it consists of two mountains connected by a narrow stretch of arid low land, a part of which contains a large salt lagoon bordered by a heavy growth of mangroves. The eastern

mountain is 3240 feet in height and is known as Mount Margarita, the western one being named Cerros de Macanao and having an elevation of but 2304 feet. The summits are barren, but the lower portions are covered with a luxuriant tropical vegetation and there are numerous plantations of cocoanut and fruit trees. The island is about 37 miles in length and has an area of about 440 square miles. The population is variously estimated at from 20,000 to 39,000.

Mr. Ferry devoted a month to Margarita (February 17 to March 21, 1909,) and procured a fine series of birds, including several novelties and a number of species not previously recorded from the island.

ORNITHOLOGICAL BIBLIOGRAPHY.

Practically nothing was written regarding the avifauna of Margarita prior to 1895, with the exception of a few brief notes by various travelers, references to which are given by Mr. Wirt Robinson, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, pp. 651, 652.

1895. RICHMOND, C. W. Description of three new Birds from the Island of Margarita, Venezuela. The Auk, Vol. XII, 1895, pp. 367-371.
1895. ROBINSON, W., AND RICHMOND, C. W. An annotated List of Birds observed on the Island of Margarita and at Guanta and Laguayra, Venezuela (with map). Proc. U. S. Nat. Mus., Vol. XVIII, 1895, pp. 649-685.
1902. CLARK, A. H. The Birds of Margarita Island, Venezuela. Auk, Vol. XIX, 1902, pp. 258-267.
1907. LOWE, P. R. On the Birds of Margarita Island, Venezuela. Ibis, 1907, pp. 547-570.

BIRDS OF MARGARITA.

Family **Laridæ**.

Larus atricilla *Linn.*

Not uncommon. Mr. Ferry shot one specimen, ♂, in March. Both Captain Robinson and Mr. Clark found it common in July.

Phaethusa magnirostris (*Licht.*).

Captain Robinson states, "A few were seen along the beaches of Margarita." (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 653.)

Sterna eurygnatha *Saunders*.

Given by Captain Robinson as "common along the beaches." Mr. Ferry did not find this species at Margarita, but he obtained a specimen at Aruba.

Sterna antillarum (*Less.*).

Captain Robinson found this species abundant in July. (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 653.)

Family **Rynchopidæ**.

Rhynchops nigra *Linn.*

Both Captain Robinson and Mr. Clark found this species at Margarita in July. None were taken or observed by Mr. Ferry in January.

Family **Procellariidæ**.

Oceanites oceanicus (*Kuhl*).

Recorded by Mr. Clark, who states, "On July 2 a flock of about two dozen of these birds came about the boat in which I was crossing from the mainland." (Auk, 1902, p. 260.)

Family **Sulidæ**.

Sula leucogastra (*Bodd.*).

Mr. Clark observed what he believed to be this species between Margarita and the mainland. (Auk, 1902, p. 260.)

Sula piscator (*Linn.*).

Mr. Clark states, "Midway between the mainland and the island a few small white Gannets, probably *Sula piscator* Vieillot, appeared." (Auk, 1902, p. 260.)

Family **Phalacrocoracidæ**.

Phalacrocorax vigua (*Vieill.*).

2 specimens, both females. This is probably the species seen by both Captain Robinson and Mr. Clark. "Locally common" (Ferry).

Family **Pelecanidæ.****Pelecanus occidentalis** *Linn.**Pelecanus fuscus* of authors.

Given as common by Captain Robinson and Mr. Clark. Mr. Ferry found it common in February and March, but no specimens were taken.

Family **Fregatidæ.****Fregata aquila** (*Linn.*).

Given as common by Mr. Ferry, Mr. Clark and Captain Robinson.

Family **Anatidæ.****Dendrocygna** *sp. ?*

Not observed by Mr. Ferry or Mr. Clark, but Captain Robinson states: "In the lagoon at the southeast extremity of the island, I saw a flock of a half dozen tree ducks, but I was unable to approach within range. They flew off toward the mainland." (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 655.)

Family **Phœnicopteridæ.****Phœnicopterus ruber** *Linn.*

Recorded by Mr. Lowe. (*Ibis*, 1907, p. 550.)

Family **Plataleidæ.****Ajaia ajaia** (*Linn.*).

1 specimen, ♀, taken by Mr. Ferry.

Family **Ibididæ.****Guara rubra** (*Linn.*).

1 specimen, ♀, taken; others were seen. "The natives reported this species as quite common in the mangrove swamps bordering the lagoon." (Ferry.)

Family **Ardeidæ**.**Ardea occidentalis** *Aud.*

Mr. Lowe states: "An example of *Ardea occidentalis* was caught alive and liberated." (*Ibis*, 1907, p. 554.)

Ardea herodias *Linn.*

Mr. Lowe procured a specimen on Margarita Island, January 6, 1904. (*Ibis*, 1907, p. 554.)

Herodias egretta (*Gmel.*).

Recorded from Margarita Island by Mr. Lowe. (*Ibis*, 1907, p. 554.)

Egretta candidissima (*Gmel.*).

Leucophoyx candidissima Lowe, *Ibis*, 1907, p. 554.

Also recorded from Margarita by Messrs. Robinson and Clark.

Florida cærulea (*Linn.*).

Recorded by Mr. Lowe. (*Ibis*, 1907, p. 550.)

Hydranassa tricolor ruficollis (*Gosse*).

3 specimens, 1 ♂, 2 ♀, taken by Mr. Ferry.

Butorides virescens robinsoni (*Richmond*).

Butorides robinsoni Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 655.

Seen but not taken by Mr. Ferry.

Nycticorax nycticorax nævius (*Bodd.*).

1 specimen, a female, taken by Mr. Ferry. It had not previously been recorded from Margarita.

Nyctanassa violacea (*Linn.*).

1 specimen, ♀, being, as far as I am aware, the first record of its occurrence on the island. Mr. Ferry also obtained a bird of this species on *Islas de Aves*.

Family **Scolopacidæ**.**Pisobia minutilla** (*Vieill.*).

Limonites minutilla Lowe, *Ibis*, 1907, p. 553.

Not uncommon. 1 specimen, ♀, taken March 12 by Mr. Ferry; also taken by Mr. Lowe, January 6, 1904.

Ereunetes pusillus (*Linn.*).

1 specimen, ♀, March 12, 1909.

Ereunetes mauri (*Caban.*).

Ereunetes occidentalis Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 656.

Taken by Captain Robinson, July 7.

Calidris leucophæa (*Pallas*):

Calidris arenaria Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 656.

Taken by Captain Robinson, July 7.

Totanus flavipes (*Gmel.*).

Recorded as not uncommon by Mr. Lowe, who procured specimens, March 23, 1906. (*Ibis*, 1907, p. 554.)

Catoptrophorus semipalmatus (*Gmel.*).

Symphemia semipalmata Lowe, *Ibis*, 1907, p. 553.

Mr. Ferry took a female of this species, March 12, 1909. Mr. Lowe states he observed several flocks of these birds and took an adult specimen, March 24, 1906.

Actitis macularia (*Linn.*).

Tringoides macularius Lowe, *Ibis*, 1907, p. 553.

Taken by Mr. Lowe, January 6, 1904.

Numenius hudsonicus *Lath.*

3 specimens, 2 ♂, 1 ? . Not previously recorded from Margarita.

Family **Charadriidæ.****Ægialitis semipalmata** *Bonap.*

Recorded by Mr. Lowe, who procured an adult female, January 9, 1904. (*Ibis*, 1907, p. 553.) It was also taken by Captain Robinson in July.

Ægialitis nivosa *Cass.*

Recorded by Messrs. Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 656. Mr. Robinson obtained a specimen, July 2.

Ægialitis collaris *Vieill.*

Mr. Robinson found this species common along the beaches in July. (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 657.)

Ochthodromus wilsonius rufinuchus (*Ridgw.*).

Not uncommon. Five specimens taken by Mr. Ferry, 2 ♂, 3 ♀; also noted by Messrs. Lowe, Richmond, and Robinson.

Family **Aphrizidæ**.

Arenaria interpres morinella (*Linn.*).

Arenaria interpres Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 657 (July); Clark, Auk, 1902, p. 260 (July).

Not recorded by Mr. Ferry in February and March.

Family **Ædicnemidæ**.

Ædicnemus bistrriatus (*Wagler*).

Captain Robinson states, "In a courtyard of a dwelling in Por-lamar, I saw several pairs of these birds, and their owner told me that he had caught them when not fully fledged in the wide savanna to the west of the town." (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 656.)

Family **Hæmatopodidæ**.

Hæmatopus palliatus *Temm.*

Recorded by Mr. Lowe. (Ibis, 1909, p. 314.)

Family **Odontophoridaæ**.

Eupsychortyx pallidus *Richmond*.

9 specimens, 6 ♂, 3 ♀.

"These birds were found in abundance at Mocanao, the peninsula at the west end of the island, and in riding along the cactus-covered plains from Boca del Rio (south central part of the island) we saw several flocks." (Ferry.)

I have examined the type (taken July 2) described by Dr. Richmond (Proc. U. S. Nat. Mus., 1895, p. 657) and compared it with the specimens taken by Mr. Ferry on Margarita in February and March, and they are strikingly different in coloration. Far from being pale, they are distinctly the reverse, being fully as highly colored as any of the allied forms from the mainland. It would seem probable that the difference is due to season, as it is unlikely that two forms of the same species inhabiting the same localities would be found on Mar-

garita; but to complicate matters Mr. Lowe procured specimens in January, 1904, which he describes as *much paler* than birds from the mainland (Ibis, 1907, p. 551). Compared with birds from British Guiana (March) and Caracas, Venezuela (March), the specimens from Margarita (March) are darker and the markings, especially on the under parts are quite different.

In the six males now before me the breast is plain, bright, rufous chestnut in some and rufous chestnut tinged with vinaceous in others. All the specimens show a black collar, but some have the throat mixed black and rufous, others tawny and white, while one has the throat plain white. On the lower breast and upper belly the feathers are marked with black and white, but the middle portion of the feather is bright rufous chestnut, not dark chestnut, as in Venezuela specimens, and the white spots are larger and fewer in number. On the upper parts the back and scapular feathers show more deep chestnut than birds from British Guiana and Venezuela and the crest is longer and somewhat paler. The Margaritan bird approaches nearer in coloration to *E. parvicristatus* than to *E. sonnini*, but the general markings are somewhat different and the crest is longer and paler.

The differences between the Margaritan bird and *E. cristatus* (Linn.) from Aruba and Curaçao are so pronounced that comparison is not necessary.

The measurements of eight specimens from Margarita are as follows:

♂	wing,	4.05;	tail,	2.50;	tarsus,	1	;	bill,	.50;	crest feathers,	1.10
♂	"	4.20;	"	2.55;	"	1	;	"	.50;	"	1.12
♂	"	4.12;	"	2.50;	"	1.05;	"	.48;	"	"	1.15
♂	"	4.05;	"	2.48;	"	1.05;	"	.50;	"	"	1.15
♂	"	4.15;	"	2.45;	"	1.02;	"	.50;	"	"	1.18
♂	"	4.05;	"	2.50;	"	1	;	.52;	"	"	1.20
♀	"	4	;	2.50;	"	1	;	.48;	"	"	1
♀	"	4.05;	"	2.45;	"	1	;	.48;	"	"	1.05

Family Cracidae.

Ortalis ruficauda Jardine.

1 specimen, ♀, taken March 5, 1909.

"These birds are common locally throughout the mountainous portion of the island and are found at an altitude where humid conditions are met. They are extremely shy." (Ferry.)

Captain Robinson saw specimens of this bird in captivity on Margarita, but he did not obtain specimens in the wild state. As far as I am aware, it has not previously been taken by a collector from this locality.

In the single specimen before me the sides of the body and under tail coverts are clear red brown, not tawny rufous brown as in specimens I have examined from Tobago, and the ends of the tail feathers are darker rufous brown, otherwise it is apparently similar to birds from that island. I have not been able to compare it with specimens from Venezuela.

Family **Columbidae**.

Columba gymnophthalma *Temm.*

2 specimens, 1 ♂, 1 ♀.

Leptotila verreauxi (*Bonap.*).

Leptotila insularis Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 659. Clark, Auk, XIX, 1902, p. 261.

3 specimens, 2 ♂, 1 ♀.

I cannot distinguish specimens from Margarita from those from the mainland or from Trinidad, and cannot agree with Dr. Richmond in recognizing the island form as separable. Mr. Lowe describes the colors of the soft parts in the fresh state as, "Circumorbital space bright cobalt-blue. Iris dirty yellow. Bill uniformly black; tarsi and feet reddish pink." (*Ibis*, 1907, p. 552.)

Zenaida vinaceo-rufa *Ridgway.*

Recorded from Margarita by Robinson and Richmond (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 658). Not observed by Mr. Ferry.

Chæmepelia passerina perpallida (*Hartert*).

13 specimens, 5 ♂, 8 ♀.

These birds are apparently similar to those from the other islands.

Chæmepelia rufipennis *Bonap.*

Recorded by Captain Robinson and Mr. Clark. Mr. Ferry did not procure specimens, but writes, "Several of these birds were seen at an altitude of about 1800 feet in a very dry forested hillside."

Scardafella ridgwayi *Richmond.*

Scardafella ridgwayi Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 660.

19 specimens, 10 ♂, 9 ♀.

This well-marked form is reported very common on Margarita.

Family **Cathartidæ.****Cathartes aura** (Linn.).

Recorded as common by Captain Robinson (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 661); also noted by Messrs. Lowe and Clark. Mr. Ferry informs me he found it common on the island; but no specimens were taken.

Catharista urubu (Vieill.).

Catharista atrata of authors.

Mr. Ferry found this species common at sea-level, but only occasionally at higher altitudes. No specimens were taken.

Given by Mr. Clark as abundant near Porlamar. "Abundant everywhere." (Robinson.)

Family **Falconidæ.****Buteo albicaudatus** Vieill.

1 specimen, ♂.

"Distributed throughout the island, but nowhere common; usually one pair to a locality. On March 1, found a nest containing three eggs in the northeastern portion of the island. The nest was built on the outer branch of an acacia tree. Incubation was far advanced; the female was very wild but I was able to secure the male. The crop was full of grasshoppers." (Ferry.) The eggs are soiled white and measure 2.25 x 1.80 in.

Falco sparverius isabellinus (Swains.).

Falco sparverius Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 661. Clark, Auk, 1902, p. 261.

Cerchmeis isabellina Lowe, Ibis, 1907, p. 556.

6 specimens, 4 ♂, 2 ♀.

The four males are all adult and have the top of the head blue gray, without rufous, and the under parts unspotted.

Males, wing, 6.75 to 7 ; tail, 4.85 to 5.10; tarsus, 1.20

Females, " 7.25 to 7.50; " 5.25 ; " 1.25

Gampsonyx swainsoni Vigors.

Mr. Ferry procured a single specimen of this species, a male, taken at Porlamar, February 2, 1909. Mr. Clark found it common at El Valle in the summer of 1901 (Auk, 1902, p. 261).

Polyborus cheriway (*Jacq.*).

1 specimen, ♀, taken March 9; others seen.

Family **Strigidae**.**Speotyto brachyptera** *Richmond*.

Speotyto brachyptera Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 663.

1 specimen, ♀.

Pisorhina choliba (*Vieill.*).

Megascops choliba Berlepsch, Bull. Brit. Orn. Club, Vol. XII, 1902, p. 9.

Megascops brasiliannus Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, p. 662, Clark, Auk, 1902, p. 262.

Pisorhina choliba Lowe, Ibis, 1907, p. 556.

3 specimens, 2 ♂, 1 ♀, which are decidedly smaller and paler than those I have examined from British Guiana and Colombia. Judging from the material before me, the Margaritan birds are separable at least subspecifically, but from lack of a satisfactory series for comparison, I refer it provisionally to this species.

Glaucidium phalænoides (*Daudin*).

Recorded by Captain Robinson and Mr. Clark. It was not taken or observed by Mr. Ferry.

Aluco *sp.* ?

Mr. Ferry saw what he believed to be a species of *Aluco* in a cave in the mountain above El Valle, but the bird was not taken.

Family **Psittacidae**.**Amazona ochroptera rothschildi** (*Hartert*).

Amazona ochroptera Lowe, Ibis, 1907, p. 557.

4 specimens, 2 ♂, 1 ♀, 1 ?, which are referred provisionally to this form. (See remarks under Blanquilla, page 223.)

Amazona amazonica (*Linnaeus*).

I have examined a specimen of this species in the collection of the Smithsonian Institution, taken on Margarita by Captain Robinson

in July. Mr. Clark also found it not uncommon in July (Auk, 1902, p. 262), but it was not observed by either Mr. Ferry or Mr. Lowe, who visited the island in February and March. Strange to say, both Mr. Ferry and Mr. Lowe found *A. ochroptera rothschildi* not uncommon, which was not noted by Captain Robinson or Mr. Clark later in the season. Captain Robinson states, "I saw many large flocks in the heavy forest in rear of El Valle." (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 664.)

Conurus æruginosus (Linn.).

22 specimens, 10 ♂, 12 ♀.

Mr. Ferry found this species very common in the vicinity of Por-lamar. It appears to be generally distributed throughout the lower portions of the island.

Conurus neoxenus *sp. nov.*

Type No. 37454, Field Museum of Natural History (Margarita Island).

Adult male: General plumage bright green, brightest on the cheeks and lores and palest on the under parts; forehead and front of head from above the eye, including about two-thirds of crown, dull blue; lesser under wing coverts green; greater under wing coverts olive yellow; quills green with black shafts; the greater portion of the inner webs olive yellow on basal three-fourths; terminal portion of inner webs edged with dusky brown; the fourth, fifth and sixth primaries with dark tips (from $\frac{1}{4}$ to $\frac{1}{2}$ inch in length), showing a faint bluish tinge near the ends; under surface of inner webs olive yellow; the outer feathers edged with dusky brown near the ends; upper surface of two middle tail feathers green with dark shafts; the rest have the greater portion of the inner web deep red; outer webs and ends of inner webs green. These colors are replaced on the under surfaces by golden olive and lighter red. Both mandibles pale, the under one dark near the edge.

Length (skin), 13 in.; wing, 7.20; tail, 7; tarsus, .55; bill, 1.15.

This species is somewhat similar to *Conurus hæmorrhous* from Brazil, but differs in the darker green plumage, wing markings, extent of blue on the head, etc.

Two specimens, a male and a female, were taken. Mr. Ferry informs me they were shot March 11, 1909, in a cactus country near Boca del Rio in the south central portion of the island.

Family **Cuculidæ.****Crotophaga ani** *Linn.*

8 specimens, 3 ♂, 2 ♀, 3 young.

Diplopterus nævius (*Linn.*).

Captain Robinson states: "I saw several pairs of these birds in the small thickets on the partly bare hillsides near El Valle, and obtained one specimen." (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 665.) It has not been recorded by other writers from Margarita and was not seen by Mr. Ferry.

Family **Bucconidæ.****Bucco bicinctus** (*Gould.*)

7 specimens, 2 ♂, 5 ♀.

"These birds were distributed throughout the island and are probably common." (Ferry.)

Family **Alcedinidæ.****Ceryle torquata** (*Linn.*).

Recorded by Mr. Lowe. (Ibis, 1907, p. 550.)

Ceryle alcyon (*Linn.*).

Recorded by Mr. Lowe. (Ibis, 1907, p. 550.)

Family **Picidæ.****Melanerpes subelegans** (*Bonap.*).

Melanerpes subelegans Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 666. Clark, Auk, 1902, p. 263. Lowe, Ibis, 1907, p. 560.

13 specimens, 5 ♂, 8 ♀. Apparently does not differ from specimens from the mainland.

Family **Caprimulgidæ.****Chordeiles acutipennis** (*Bodd.*).

Recorded by Mr. Clark (Auk, 1902, p. 263) and Captain Robinson (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 668). It was not taken by Mr. Ferry.

Stenopsis cayennensis (Gmel.).

Stenopsis cayennensis Clark, Auk, 1902, p. 263. Lowe, Ibis, 1907, p. 558.

Mr. Ferry procured three specimens of this species, 2 females and a male; one of the former about half grown.

Family **Micropodiæ.****Chætura cinereiventris lawrencei** Ridgway.

Recorded by Captain Robinson, who took a specimen at El Valle (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 668). Swifts supposed to be this species were seen by Mr. Lowe (Ibis, 1907, p. 550).

Family **Trochilidæ.****Chrysolampis mosquitus** (Linn.).

One specimen, an immature female, was taken by Mr. Ferry at La Asuncion March 5, 1909. It is apparently not common on Margarita, as Mr. Lowe obtained only one of this species (Ibis, 1907, p. 118). It was not obtained by Captain Robinson or Mr. Clark.

Chlorostilbon caribæus Lawr.

4 specimens, 3 ♂, 1 ♀. Not uncommon, but apparently does not differ from examples of this species from other localities.

Doleromya pallida Richmond.

Doleromya pallida Richmond, Auk, 1895, p. 369.

14 specimens, 13 ♂, 1 ?

This well-marked form seems to be common throughout the lower parts of the island. Mr. Ferry found it very common in the vicinity of Porlamar and Mr. Lowe gives it as "Very common everywhere in the cactus-scrub."

Amazilia aliciaë Richmond.

Amazilia aliciaë Richmond, Auk, 1895, p. 670.

5 specimens, 1 ♂, 3 ♀, 1 ?

Mr. Ferry procured specimens at Porlamar and at La Asuncion. Mr. Lowe says: "I only saw this bird in the heights above El Valle, among the tall forest trees." (Ibis, 1907, p. 558). Captain Robinson says: "None at all were found in the coast region and only a few in El Valle; but in ascending the heavily wooded mountains in rear,

they became more abundant until, when I had reached the perpetual clouds that hung about the peak and entered an atmosphere of mist, they were seen in all directions." (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 670.)

Family **Tyrannidæ.**

Milvulus tyrannus (Linn.).

Captain Robinson found this species common in July (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 672).

Tyrannus dominicensis (Gmel.).

Tyrannus dominicensis Robinson & Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 672. Clark, Auk, 1902, p. 263.

Mr. Ferry procured a pair of these birds at La Asuncion and others were seen.

Tyrannus melancholicus satrapa (Cab. & Heine).

11 specimens, 7 ♂, 4 ♀.

Myiarchus tyrannulus (Müller).

16 specimens, 11 ♂, 4 ♀, 1 ?

Sublegatus glaber Scl. & Salv.

Sublegatus arenarum Lowe, Ibis, 1907, p. 562.

9 specimens, 4 ♂, 3 ♀, 2 ?

In the Margaritan specimens before me the yellow on the under parts is brighter than in birds from Bonaire, Aruba, and Venezuela (Caracas).

Euscarthmus impiger Scl. & Salv.

3 specimens, 1 ♂, 1 ♀, 1 ?

"These birds were found only on the arid plains at the west end of the island among the exceedingly dry chaparral." (Ferry.) The specimens apparently do not differ from those from the mainland. The species has not been previously recorded from Margarita.

Family **Pipridæ.**

Chiroprion lanceolata (Wagler).

18 specimens, 11 ♂, 7 ♀,

Mr. Ferry found this species common in heavily wooded districts. Captain Robinson found it breeding in July (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 672).

Family **Formicariidæ.****Thamnophilus doliatus** (*Linn.*).

14 specimens, 6 ♂, 8 ♀.

The females are paler than birds from Venezuela in the Museum collection, although they agree very well with those from Tobago. Mr. Ferry found these birds common in the underbrush of the higher mountain regions. On March 3 a female was observed feeding two nearly full-grown young birds.

Formicivora intermedia *Caban.*

11 specimens, 8 ♂, 3 ♀.

Family **Dendrocolaptidæ.****Dendroplex longirostris** *Richmond.*

11 specimens, 6 ♂, 5 ♀.

The characters given by Dr. Richmond as distinguishing this species appear to be constant. "These birds were tolerably common and almost universally distributed over the island. They were equally at home upon the arid cactus-covered plains and in the dense forests on the mountains." (Ferry.)

Dendroornis susurrans (*Jard.*).

1 specimen, ♀.

Mr. Ferry took a single specimen of this species in a dense forest on a mountain called El Copey at an altitude of 2500 feet. It differs slightly from specimens from Tobago and the mainland in having the under parts more olive and the shaft stripes on the head and breast feathers more tawny. Whether these differences are constant or not remains for future investigators to determine.

Family **Furnariidæ.****Synallaxis albescens nesiotis** *Clark.*

Synallaxis albescens Robinson & Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 674.

Synallaxis albescens nesiotis Clark, Auk, 1902, p. 264.

8 specimens, 7 ♂, 1 ♀.

In the series before me the characters given by Mr. Clark in separating this subspecies seem fairly constant.

Family **Icteridæ**.

Icterus icterus (*Linn.*).

24 specimens, 17 ♂, 7 ♀.

Icterus xanthornus helioeides *Clark*.

Icterus xanthornus Robinson & Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 675.

Icterus xanthornus helioeides Clark, Auk, 1902, p. 265.

44 specimens, 31 ♂, 11 ♀, 2 juv.

As stated by Mr. Clark, the Margaritan bird is somewhat more highly colored and the black throat *averages* more extensive. The differences in the bill and feet, although slight, appear to be fairly constant.

Holoquiscalus insularis (*Richmond*).

Quiscalus insularis Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 675. Clark, Auk, 1902, p. 265. Lowe, Ibis, 1907, p. 570.

Holoquiscalus insularis Ridgway, Proc. Wash. Acad. Sci., Vol. III, 1901, p. 151.

11 specimens, 7 ♂, 4 ♀.

Family **Fringillidæ**.

Tiaris bicolor omissa (*Jardine*).

20 specimens, 12 ♂, 8 ♀.

Cardinalis phœniceus robinsoni *Richmond*.

Cardinalis robinsoni Richmond, Auk, 1895, p. 370. Robinson & Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 676. Clark, Auk, 1902, p. 265.

Cardinalis phœniceus robinsoni Lowe, Ibis, 1907, p. 567.

47 specimens, 35 ♂, 12 ♀.

It is with considerable hesitation that I have admitted the Margaritan bird to even subspecific recognition. In the comparatively large series before me, none of the supposed distinguishing characters are constant. I do not find any noticeable difference in size or coloration, although a majority of the birds have the crests shorter than those from the mainland.

Volatinia jacarini splendens (*Vieill.*).

Recorded by Captain Robinson (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 677), but not observed by other ornithologists who have visited the island.

Coryphospingus pileatus (*Newwied*).

Mr. Ferry procured 3 specimens, all males, which agree very well with specimens from the mainland. The species has not previously been recorded from Margarita. "These birds were fairly common in the arid areas of chaparral back of the town of Macanao. They were found nowhere except upon these dry forested plains and kept to the underbrush rather than to higher trees." (Ferry.)

Family **Tangaridae**.**Tangara palmarum melanoptera** (*Sclater*).

16 specimens, 8 ♂, 8 ♀.

Tangara glaucocolpa (*Caban.*).

7 specimens, 4 ♂, 3 ♀.

Tachyphonus melaleucus (*Sparrm.*).

7 specimens, 5 ♂, 2 ♀.

Family **Hirundinidae**.**Progne chalybea** (*Gmel.*).

Mr. Ferry procured an adult male of this species at Porlamar. Captain Robinson and Mr. Clark found it nesting at Porlamar and also at El Valle.

Family **Vireonidae**.**Vireosylva chivi agilis** (*Licht.*).

Captain Robinson states that he found this Vireo common in the forests around El Valle (Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 678). It was not taken by Mr. Ferry.

Pachysylvia griseipes (*Richmond*).

Hylophilus griseipes Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 678. Clark, Auk, 1902, p. 266.

Pachysylvia griseipes Lowe, Ibis, 1907, p. 561.

6 specimens, 3 ♂, 3 ♀.

Family **Cœrebidæ.****Cœreba luteola** (*Caban.*).

11 specimens, 6 ♂, 5 ♀.

Cyanerpes cyaneus brevipes (*Caban.*).*Arbelorhina brevipes* Cabanis, Mus. Hein., I, 1850, p. 96.*Arbelorhina eximia* Cabanis, Mus. Hein., I, 1850, p. 96.*Arbelorhina cyanea eximia* Robinson & Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 679.

A single male taken at Porlamar, February 17, which is noticeable for its large bill. The measurements are as follows: wing, 2.45; tarsus, .46; bill, .82.

Dacnis plumbea (*Lath.*).

10 specimens, 6 ♂, 4 ♀.

The Margaritan birds apparently do not differ from those from other localities. The species has not previously been recorded from the island. "These birds were common in mangrove swamps at Boca del Rio; 2 or 3 were usually seen together." (Ferry.)

Family **Mniotiltidæ.****Dendroica ruficapilla rufopileata** *Ridgw.*

A single immature specimen was taken by Mr. Ferry on Margarita, which I refer provisionally to this form. See remarks on page 218.

Compsothlypis pitiaiyumi (*Vieill.*).

2 specimens, 1 ♂, 1 ♀; not previously recorded from Margarita.

Setophaga ruticilla (*Linn.*).

Mr. Lowe states that he procured three specimens, March 19–20, 1906. (*Ibis*, 1907, p. 565.) It was not observed by Mr. Ferry.

Family **Mimidæ.****Mimus gilvus** (*Vieill.*).

31 specimens, 18 ♂, 11 ♀, 2 ?

Many specimens are more or less indeterminate, but the majority approach nearer *gilvus* than to *rostratus*.

Family **Sylviidae**.**Polioptila plumbeiceps** *Lawrence*.

19 specimens, 7 ♂, 8 ♀, 4 ?.

Family **Turdidae**.**Planesticus gymnophthalmus** (*Caban.*).

1 specimen, a female, which does not apparently differ from specimens from the mainland. The species has not previously been recorded from Margarita.

Platycichla venezuelensis atra *subsp. nov.*

Platycichla carbonaria Robinson and Richmond, Proc. U. S. Nat. Mus., Vol. XVIII, 1895, p. 681.

Type No. 37714, Field Museum of Natural History (Margarita Island, Venezuela.).

Adult male: Whole of head, nape, and under parts (except sides of body, flanks, and under tail coverts) black; sides of body, flanks, and under tail coverts dark slaty gray; back and rump slaty gray, many of the feathers tipped with black; scapulars slaty gray, edged with black; wings and tail black; bill, legs, feet, and eye-ring yellow.

Length (skin), 8.40; wing, 4.50; tail, 3.50; tarsus, 1; bill, .72.

This form is similar to *P. melanopleura* Sharp, but differs in having the entire head black and the under tail coverts and axillaries gray. From *P. venezuelensis* it differs in having the entire under parts (except the sides, flanks, and under tail coverts) black, while the mainland form as represented by specimens from Venezuela in this Museum have only the throat and breast black and the rest of the under parts gray. Females from Margarita do not appear to differ from those of *P. venezuelensis*.

Mr. John F. Ferry informs me he found these birds common in the dense forests of the humid mountain regions, particularly at El Copey above La Asuncion.

TABLE OF SPECIES AND SUBSPECIES

✕=specimens in this Museum; +=recorded by other writers;
○=observed but not taken.

	Aruba	Curaçao	Bonaire	Islas de Aves	Los Roques	Orchilla	Tortuga	Blanquilla	Los Hermanos	Testigos Is.	Margarita
Larus atricilla	+	+	+								✕
Phaethusa magnirostris.....	✕	+	+								+
Sterna maxima.....	✕	+	+		✕						+
Sterna eurygnatha.....	✕	+	+								+
Sterna hirundo.....	✕	+	+								+
Sterna dougalli.....	+										
Sterna antillarum.....	✕		+								+
Sterna fuliginosa.....	✕								✕		
Sterna anæthetus.....	+										
Anous stolidus.....									✕		
Rhynchops nigra.....											+
Oceanites oceanicus.....											+
Phætho æthereus.....									+		
Sula leucogastra.....				✕					+	+	
Sula piscator.....									+	+	
Sula cyanops.....									✕	+	
Phalacrocorax vigua.....	✕										✕
Pelecanus occidentalis.....	✕	+	+		○	○	○	○		○	+
Fregata aquila.....	✕	+	+		○	○	○	○	+	○	+
Dendrocygna sp ?.....											+
Phœnicopterus ruber.....	+		+		✕	○					✕
Ajaia ajaia.....	✕										✕
Guara rubra.....											✕
Ardea occidentalis.....											+
Ardea herodias.....		+			✕					+	+
Herodias egretta.....											+
Egretta candidissima.....	+		+								+
Hydranassa tricolor.....	+		+								+
Hydranassa tricolor ruficollis.....	✕										✕
Florida cærulea.....	✕										+
Dichromanassa rufescens.....					✕						
Butorides virescens ?.....		+	+								
Butorides virescens robinsoni.....	✕				✕			+			+
Nycticorax nycticorax nævius.....											✕
Nyctanassa violacea.....				✕							✕
Himantopus mexicanus.....		+	+		✕						
Pisobia maculata.....	✕										+
Pisobia minutilla.....	✕		+						+		✕
Ereunetes pusillus.....	✕										✕
Ereunetes mauri.....											+

	Aruba	Curaçao	Bonaire	Islas de Aves	Los Roques	Orchilla	Tortuga	Blanquilla	Los Hermanos	Testigos Is.	Margarita
<i>Bucco bicinctus</i>											✱
<i>Ceryle torquata</i>											+
<i>Ceryle alcyon</i>								+		+	+
<i>Melanerpes subelegans</i>											+
<i>Chordeiles acutipennis</i>		o									+
<i>Stenopsis cayennensis</i>		+	+								✱
<i>Chaetura cinereiventris lawrencei</i>											+
<i>Florisuga mellivora</i>	✱										✱
<i>Chrysolampis mosquitus</i>	✱	✱	✱				✱	✱			✱
<i>Chlorostilbon caribæus</i>	✱	✱	✱							+	✱
<i>Doleromya pallida</i>							✱	✱			✱
<i>Amazilia aliciae</i>											✱
<i>Milvulus tyrannus</i>											+
<i>Tyrannus dominicensis</i>	✱	✱	✱					+			✱
<i>Tyrannus melancholicus satrapa</i>	✱	✱									✱
<i>Myiarchus tyrannulus</i>										+	✱
<i>Myiarchus tyrannulus brevipennis</i>	✱	✱	✱		✱			+			✱
<i>Sublegatus glaber</i>	✱	✱	✱		✱						✱
<i>Elænia martinica riisii</i>	✱	✱	✱								✱
<i>Euscarthmus impiger</i>											✱
<i>Chiropion lanceolata</i>											✱
<i>Thamnophilus doliatus</i>											✱
<i>Formicivora intermedia</i>											✱
<i>Dendroplex longirostris</i>											✱
<i>Dendromis susurrans</i>											✱
<i>Synallaxis albescens nesiotis</i>											✱
<i>Icterus icterus</i>											✱
<i>Icterus icterus ridgwayi</i>	✱	+									✱
<i>Icterus xanthornus curasoensis</i>	✱	✱	✱								✱
<i>Icterus xanthornus helioeides</i>											✱
<i>Holoquiscalus insularis</i>										✱	✱
<i>Holoquiscalus orquillensis</i>									✱		✱
<i>Dolichonyx oryzivorus</i>	✱										✱
<i>Spiza americana</i>	✱										✱
<i>Brachospiza capensis insularis</i>	✱	✱									✱
<i>Ammodramus savannarum caribeus</i>		+	✱								✱
<i>Tiaris sharpei</i>	✱	✱	✱								✱
<i>Tiaris johnstonei</i>											✱
<i>Tiaris tortugensis</i>											✱
<i>Tiaris bicolor omissa</i>							✱				✱
<i>Cardinalis phœniceus robinsoni</i>											✱
<i>Volatinia jacarini splendens</i>											+
<i>Coryphospingus pileatus</i>											✱
<i>Tangara palmarum melanoptera</i>											✱
<i>Tangara glaucocolpa</i>											✱
<i>Tachyphonus melaleucus</i>											✱
<i>Progne chalybea</i>											✱
<i>Hirundo erythrogaster</i>		o									✱
<i>Vireosylva chivi agilis</i>			✱								+
<i>Pachysylvia griseipes</i>											✱
<i>Cereba uropygialis</i>	✱	✱	✱								✱
<i>Cereba luteola</i>											✱
<i>Cereba ferryi</i>							✱				✱

