No. 15.— Birds from the Rain Forest Region of Vera Cruz.

BY OUTRAM BANGS AND JAMES L. PETERS.

IN the winter of 1925 Col. John E. Thayer, who has done so much in the past to enrich the collection of birds in the Museum of Comparative Zoölogy, sent the veteran collector Wilmot W. Brown to Vera Cruz in search of that great ornithological rarity *Hylorchilus sumichrasti* (Lawrence). Mr. Brown went to Motzorongo where he made his headquarters at the Shaw Ranch.

He collected at two localities in the heavy rain forest of this region, Motzorongo and Presidio, of which he writes,

The climate here is hot and steamy and there is a heavy rainfall, the mountains — most of the time veiled in mists — are heavily forested, the trees growing so close together that it makes it quite dark and gloomy underneath and difficult to see the birds. There is also a dense undergrowth and the slopes are steep and rocky.

Although Mr. Brown's main object was to secure Hylorchilus, he managed to make a fairly good representative collection of birds of the immediate region. This collection consists of about 300 specimens, which Mr. Thayer has generously presented to the Museum of Comparative Zoölogy, retaining for his own use only the North American migrants.

TINAMIDAE.

CRYPTURORNIS CINNAMOMEUS CINNAMOMEUS (Lesson).

One, Q; Presidio, 27 April.

Tinamus (Nothura) cinnamomea Lesson (Rev. zool., 1842, p. 210) was described from "La Union, Centre Amerique" (La Union, Salvador). Through the kindness of Mr. D. R. Dickey, we have examined specimens from Salvador and find them practically identical with Mexican birds. An adult male from Tipitapa, Dept. of Managua, Nicaragua, is also the same as Salvador examples. The probability that the type of *Tinamus delattrii* Bonaparte (Comp. rend., 1854, **38**, p. 663, Nicaragua) came from northwestern Nicaragua is so great that we have no hesitation whatever in restricting that name to northwestern Nicaragua. Seven specimens collected in northwestern Costa Rica by C. F. Underwood form a very even series, intermediate in color between C. c. cinnamomeus (Lesson) and C. c. idoneus (Todd) (Proc. Biol. soc. Wash., 1919, 32, p. 17. Bonda, Santa Marta, Colombia) and which we therefore describe as: —

CRYPTURORNIS CINNAMOMEUS PRAEPES, subsp. nov.

TYPE. M. C. Z. 120,855. Adult J. Costa Rica; Bolson, 14 December, 1907, C. F. Underwood.

Characters.— Similar to C. c. cinnamomeus (Lesson) but upper parts, especially the interscapular region and neck much paler and browner, less greyish; sides of neck and foreneck brown, almost entirely lacking any greyish tinge. From *idoneus*, to which it is otherwise very similar, it differs in being more sandy and less reddish brown above, and in being slightly deeper cinnamomeus on the belly.

Size and proportions as in *cinnamomeus*. Wing, 155; bill from base, 30; tarsus, 47.

Specimens examined: —

Crypturornis cinnamomeus praepes nobis. Northwestern Costa Rica. Five, $\Im \Im$; two, $\Im \Im$.

Crypturornis cinnamomeus idoneus (Todd). Colombia: Santa Marta Mts. One, \mathcal{P} .

COLUMBIDAE.

SCARDAFELLA INCA INCA (Lesson).

One, ♂; Presidio, 20 March.

Scardafella i. dialeucos Bangs (Proc. Biol. soc. Wash., 1905, 18, p. 152. Boundary between Honduras and Nicaragua) has not been currently recognized, but appears to be a valid form, characterized by darker upper parts; greater extent of greyish white on the wing coverts; greater extent of white on the posterior underparts with a corresponding restriction of vinaceous on the breast, and in having heavier and more complete crossbars on the belly and abdomen. Specimens from Guatemala and Nicaragua are referable to dialeucos.

COLUMBA NIGRIROSTRIS Sclater.

One, ♂; Presidio, 20 March.

FALCONIDAE.

CLAMOSOCIRCUS GUERILLA GUERILLA (Cassin).¹ One, φ ; Presidio, 2 April.

RUPORNIS MAGNIROSTRIS GRISEOCAUDA Ridgway. One, ♂; Presidio, 3 April.

LEUCOPTERNIS GHIESBRECHTI GHIESBRECHTI (Du Bus). Two, 373; Presidio and Motzorongo, 16 February, 29 March.

STRIGIDAE.

RHINOPTYNX CLAMATOR (Vieillot).

One, σ ; Presidio, 3 May.

As far as we have been able to ascertain, this specimen constitutes the first Mexican record for the species.

CICCABA VIRGATA VIRGATA (Cassin).

One, ♂; Presidio, 27 March.

GLAUCIDIUM BRASILIANUM RIDGWAYI Sharpe.

Four, \bigcirc , \bigcirc , \bigcirc \bigcirc ; Presidio, March.

ALCEDINIDAE.

CHLOROCERYLE AMERICANA SEPTENTRIONALIS (Sharpe). Three, ♂ ♂,♀; Presidio and Motzorongo, February, March, May.

MOMOTIDAE.

Momotus LESSONII GOLDMANI Nelson. Three, ♂, ♀♀; Presidio and Motzorongo, March.

CAPRIMULGIDAE.

Nyctidromus albicollis sumichrasti Ridgway.

One, ♂; Motzorongo, 2 March.

¹ For use of Clamosocircus cf. Swann, Monog. birds prey, 1925, pt. 3, p. 145.

CYPSELIDAE.

STREPTOPROCNE ZONARIS MEXICANUS Ridgway. Four, 77; Presidio, May.

CHAETURA PELAGICA (Linné). One, ♂; Presidio, 6 May.

Chaetura richmondi Ridgway. One, ♂; Presidio, 10 May.

TROCHILIDAE.

Phaethornis adolphi adolphi Gould. One, ♀ ; Motzorongo, March.

PAMPA PAMPA CURVIPENNIS (Lichtenstein). Two, ♂, ♀; Presidio and Motzorongo, 4 March, 17 February.

CAMPYLOPTERUS HEMILEUCURUS HEMILEUCURUS (Lichtenstein). Two, ♂♂; Presidio, March, May.

AGYRTRIA CANDIDA (Bourcier and Mulsant).

One, ♀; Motzorongo, 27 February.

SAUCEROTTIA BERYLLINA BERYLLINA (Lichtenstein). One, ♂; Presidio, 1 April.

EUPHERUSA EXIMIA NELSONI Ridgway.

One, ♂; Presidio, 22 March.

This specimen is practically a topotype of *nelsoni* and agrees in all the characters pointed out for it by the describer; the measurements are: — wing, 61; tail, 40; culmen to base of forehead, 19.25.

TROGONIDAE.

TROGONURUS PUELLA (Gould).

Four, $\sigma \sigma \sigma$, φ ; Presidio, March.

CHRYSTROGON CALIGATUS (Gould).

Six, $\sigma \sigma$, $\varphi \varphi$; Presidio and Motzorongo, February, March, May.

CUCULIDAE.

PIAYA CAYANA THERMOPHILA Sclater. Two, ♀♀; Motzorongo, February, March.

TAPERA NAEVIA EXCELLENS Sclater. One, 9 ; Presidio, 6 April.

RAMPHASTIDAE.

RAMPHASTOS PISCIVORUS PISCIVORUS Linné. Two, ♂,♀; Presidio, April.

PTEROGLOSSUS TORQUATUS TORQUATUS (Gmelin). One, 7; Motzorongo, 15 February.

AULACORHYNCHUS PRASINUS PRASINUS (Gould). One, 7; Presidio, 30 April.

PICIDAE.

PICULUS RUBIGINOSUS YUCATANENSIS (Cabot). One, ♂; Presidio, 5 April.

CENTURUS DUBIUS VERAECRUCIS (Nelson). One, 9 ; Presidio, 24 May.

CENTURUS SANCTACRUZI GRATELOUPENSIS (Lesson). Two, & ; Presidio and Motzorongo, 9 February, 21 March.

FORMICARIIDAE.

THAMNOPHILUS DOLIATUS MEXICANUS Allen. Six, JJ, Q Q; Presidio and Motzorongo, February, March, April.

MICRORHOPIAS QUIXENSIS BOUCARDI (Sclater). One, 7; Presidio, 10 March.

RAMPHOCAENUS RUFIVENTRIS RUFIVENTRIS (Bonaparte). Two, 9 9; Presidio, 8, 10 March.

FORMICARIUS ANALIS MONILIGER Sclater.

One, ♂; Presidio, 29 March.

FURNARIIDAE.

SYNALLAXIS ERYTHROTHORAX FURTIVA, subsp. nov.

Sixteen, ♂ ♂, ♀ ♀; Presidio and Motzorongo, February, March, April. *Type.*— M. C. Z. 233,783. Adult ♂. Mexico: Presidio, Vera Cruz.
22 March, 1925. Wilmot W. Brown.

Characters.— Similar to Synallaxis erythrothorax erythrothorax Sclater (Coban, Guatemala, and Honduras) but median portion of abdomen greyer, less whitish, and flanks more olive without any tinge of reddish.

Measurements of a considerable series fail to show any differences in size between the two forms.

Specimens examined: —

Synallaxis erythrothorax erythrothorax Sclater. Guatemala. Five, trade skins (not sexed). British Honduras. Two, $\sigma \sigma$. Yucatan and Quintana Roo. One, φ ; one, not sexed.

Synallaxis erythrothorax furtiva nobis. Vera Cruz, Presidio, and Motzorongo. Fourteen, $\mathfrak{A}\mathfrak{A}$; two, $\mathfrak{P}\mathfrak{Q}$. Pasa Nueva. One, \mathfrak{A} . Buena Vista. One, \mathfrak{A} . Tlacolalpan. One, \mathfrak{A} .

AUTOMOLUS OCHROLAEMUS CERVINIGULARIS (Sclater).

Nine, $\sigma \sigma$, $\varphi \varphi$; Presidio, March, May.

These are all dark olive-brown. Old museum skins are much redder above and there is, as in many cases in birds of somewhat similar color, a considerable change with age of the specimens.

XENOPS MINUTUS MEXICANUS Sclater.

One, ♂; Presidio, 29 March.

Sclerurus mexicanus mexicanus Sclater.

Two, Jo?; Presidio, March, April.

DENDROCOLAPTIDAE.

DENDROCOLAPTES CERTHIA SANCTI-THOMAE (Lafresnaye). One, 7; Presidio, 30 March.

XIPHORHYNCHUS FLAVIGASTER FLAVIGASTER (Swainson). Six, JJ, QQ; Presidio and Motzorongo, March, April, May.

SITTASOMUS GRISEICAPILLUS SYLVIOIDES Lafresnaye. Four, σ , $\varphi \varphi \varphi$; Presidio and Motzorongo, March.

DENDROCINCLA ANABATINA ANABATINA Sclater. One, 9 ; Presidio, 18 February.

TYRANNIDAE.

PLATYTRICCUS CANCROMINUS (Sclater and Salvin). Two, 9 9; Presidio and Motzorongo, February, April.

CRASPEDOPRION BREVIROSTRIS (Cabanis). Two, ♂,♀; Presidio, 4 March, 20 May.

RHYNCHOCYCLUS CINEREICEPS Sclater. One, 9; Motzorongo, 10 February.

ONCOSTOMA CINEREIGULARE (Sclater). Two, ♂♂; Presidio, 27 March, 1 May.

PIPROMORPHA ASSIMILIS ASSIMILIS (Sclater). Four, 377, 9; Presidio, March, April, May.

LEPTOPOGON PILEATUS PILEATUS Cabanis. One, ♂; Presidio, 21 April.

ELAENIA FLAVOGASTER SUBPAGANA Sclater. One, 9 ; Presidio, 27 April.

Myiozettetes texensis texensis (Giraud). Four, ♂, ♀ ♀ ♀; Presidio and Motzorongo, February, March, May.

PITANGUS SULPHURATUS DERBIANUS (Kaup). Six, 3, 9, 9; Presidio and Motzorongo, February, March.

RAMPHOCAENUS RUFIVENTRIS RUFIVENTRIS (Bonaparte). Two, ♀♀; Presidio, 8, 10 March. BANG

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FORMICARIUS ANALIS MONILIGER Sclater.

One, ♂; Presidio, 29 March.

FURNARIIDAE.

SYNALLAXIS ERYTHROTHORAX FURTIVA, subsp. nov.

Sixteen, ♂♂,♀♀; Presidio and Motzorongo, February, March, April. *Type.*— M. C. Z. 233,783. Adult ♂. Mexico: Presidio, Vera Cruz.

22 March, 1925. Wilmot W. Brown. Characters.— Similar to Synallaxis erythrothorax erythrothorax Sclater

(Coban, Guatemala, and Honduras) but median portion of abdomen greyer, less whitish, and flanks more olive without any tinge of reddish.

Measurements of a considerable series fail to show any differences in size between the two forms.

Specimens examined: —

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Synallaxis erythrothorax furtiva nobis. Vera Cruz, Presidio, and Motzorongo. Fourteen, $\mathfrak{T}\mathfrak{T}$; two, $\mathfrak{P}\mathfrak{P}$. Pasa Nueva. One, \mathfrak{T} . Buena Vista. One, \mathfrak{T} . Tlacolalpan. One, \mathfrak{T} .

AUTOMOLUS OCHROLAEMUS CERVINIGULARIS (Sclater).

Nine, $\sigma, \varphi, \varphi, \varphi$; Presidio, March, May.

These are all dark olive-brown. Old museum skins are much redder above and there is, as in many cases in birds of somewhat similar color, a considerable change with age of the specimens.

XENOPS MINUTUS MEXICANUS Sclater.

One, ♂; Presidio, 29 March.

SCLERURUS MEXICANUS MEXICANUS Sclater.

Two, Jo; Presidio, March, April.

DENDROCOLAPTIDAE.

DENDROCOLAPTES CERTHIA SANCTI-THOMAE (Lafresnaye). One, ♂; Presidio, 30 March.

XIPHORHYNCHUS FLAVIGASTER FLAVIGASTER (Swainson). Six, 3, 9, 9; Presidio and Motzorongo, March, April, May.

SITTASOMUS GRISEICAPILLUS SYLVIOIDES Lafresnaye. Four, ♂, ♀ ♀ ; Presidio and Motzorongo, March.

DENDROCINCLA ANABATINA ANABATINA Sclater. One, 9 ; Presidio, 18 February.

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TYRANNIDAE.

PLATYTRICCUS CANCROMINUS (Sclater and Salvin). Two, 9 9; Presidio and Motzorongo, February, April.

CRASPEDOPRION BREVIROSTRIS (Cabanis). Two, ♂,♀; Presidio, 4 March, 20 May.

RHYNCHOCYCLUS CINEREICEPS Sclater. One, 9 ; Motzorongo, 10 February.

Oncostoma cinereigulare (Sclater). Two, ゔゔ; Presidio, 27 March, 1 May.

PIPROMORPHA ASSIMILIS ASSIMILIS (Sclater). Four, 3, 9; Presidio, March, April, May.

LEPTOPOGON PILEATUS PILEATUS Cabanis. One, ♂; Presidio, 21 April.

ELAENIA FLAVOGASTER SUBPAGANA Sclater. One, 9 ; Presidio, 27 April.

MYIOZETETES TEXENSIS TEXENSIS (Giraud). Four, ♂, ♀ ♀ ♀; Presidio and Motzorongo, February, March, May.

PITANGUS SULPHURATUS DERBIANUS (Kaup). Six, 3, 3, 9, 9; Presidio and Motzorongo, February, March.

ONYCHORHYNCHUS MEXICANUS MEXICANUS (Sclater). One, ♂; Presidio, 21 April.

MYIOBIUS XANTHOPYGUS SULPHUREIPYGIUS (Sclater). Nine, ♂♂,♀♀; Presidio and Motzorongo, February, March, April, May.

EMPIDONAX MINIMUS (W. M. and S. F. Baird). Four, 3, 9; Presidio and Motzorongo, February, March.

EMPIDONAX FLAVIVENTRIS (W. M. and S. F. Baird). Two, \Im \Im ; Presidio, 3 February, 22 March.

MYIOCHANES PERTINAX PERTINAX (Cabanis and Heine). One, 9 ; Motzorongo, 27 February.

Myiochanes Richardsonii sordidulus (Sclater). Four, ♂♂♂, ♀; Presidio and Motzorongo, February, May.

Myiarchus crinitus crinitus (Linné). Two, ♂♂; Motzorongo, 9, 22 February.

Myiarchus Lawrenceii Lawrenceii (Giraud). Two, ♂,♀; Presidio and Motzorongo, 10 March, 1 February.

Tyrannus melancholicus couchii Baird. One, ♂; Presidio, 20 February.

COTINGIDAE.

TITYRA SEMIFASCIATA PERSONATA Jardine and Selby. Three, ♂, ♀ ♀ ; Presidio, March, April.

PACHYRHAMPHUS MAJOR MAJOR (Cabanis). One, 9 ; Presidio, 2 April.

LATHRIA UNIRUFA UNIRUFA (Sclater). One, ♂; Presidio, 26 March.

HIRUNDINIDAE.

STELGIDOPTERYX RUFICOLLIS RIDGWAYI Nelson.

Two $\bigcirc \bigcirc \bigcirc \bigcirc$, in winter plumage, Motzorongo, 11, 15 February, are extreme examples of this large, dark form, the exact limits of whose range are still unknown.

| Measurements. | | | | | |
|---------------|-----|------|------|--------|----------------|
| No. | Sex | Wing | Tail | Tarsus | Culmen to base |
| 233,622 | 5 | 119 | 41 | 12 | 11 |
| 233,623 | 5 | 117 | 37 | 13 | 11 |

A male bird, M. C. Z. 102,962 from Texolo, Vera Cruz, Mexico, taken 6 March, 1899, has a wing of 113 mm. and is in color as well as size intermediate between S. r. serripennis (Audubon) and S. r. ridgwayi Nelson, though nearer the latter.

All Rough-winged Swallows are strictly representative forms and intergrade one with another, as well as by individual variation. Ridgway was quite wrong when he gave as an alternative in his key to the forms, some of which he treated as species, "without dusky spots at ends of longer undertail coverts" for *serripennis* and "with dusky spots at ends of longer undertail coverts," for the other forms. In the M. C. Z. series of seventy-four skins of *S. r. serripennis* (Audubon) from north of the Mexican-United States boundary line no less than sixteen examples have well-marked dusky spots at the ends of the longer undertail coverts, and some others have indications of such spots. Such examples, moreover, come from a number of different places scattered throughout the breeding range of the form, namely:— Georgia, Alabama, West Virginia, District of Columbia, Kansas, Colorado, California, Washington, and British Columbia. It is thus evident that the northern form has not wholly lost this character.

The immature specimen from Vera Cruz which Sclater named *fulvipennis*, "Wing, 3.7 inches," is assumed by Ridgway, probably correctly, to have been a young S. r. serripennis taken on migration. At one time the senior author used Sclater's name for the intermediate form, which ranges from Guatemala to Chiriqui, and was afterwards named S. salvini by Ridgway. This form is intermediate between S. r. serripennis and S. r. uropygialis (Lawrence), and, like the former, sometimes has the dusky spots at the ends of the longer undertail coverts and sometimes lacks them.

TROGLODYTIDAE.

Heleodytes zonatus zonatus (Lesson).

Thirteen, $\mathfrak{T}\mathfrak{T}$, $\mathfrak{P}\mathfrak{Q}$; Presidio and Motzorongo, February, March, April, May.

PHEUGOPEDIUS MACULIPECTUS MACULIPECTUS (Lafresnaye).

Ten, ♂♂, ♀♀; Presidio and Motzorongo. February, March, April, May.

TROGLODYTES AEDON PARKMANII Audubon.

One, adult \mathcal{Q} ; Presidio, 15 March.

HENICORHINA PROSTHELEUCA PROSTHELEUCA (Sclater).

Twenty-five, $\Im \Im$, $\varphi \varphi$; Presidio and Motzorongo, February, March, April, May.

This material shows that the form of *Henicorhina prostheleuca* occurring in Guatemala south to eastern Costa Rica, hitherto regarded as identical with true *prostheleuca* of southern Mexico, really represents a distinct race.

HENICORHINA PROSTHELEUCA TROPAEA, subsp. nov.

TYPE. — M. C. Z. 121,443. Adult J. Costa Rica: La Vijagua, 25 February, 1908. C. F. Underwood.

Characters.— Similar to Henicorhina prostheleuca prostheleuca (Sclater) of Vera Cruz, (type locality Cordova), Mexico and of about the same size, but pileum, central crown stripe, more reddish, less greyish brown; back and scapulars much brighter brown, almost chestnut; chest and breast more purely white, less greyish white; and flanks, crissum, and undertail coverts much brighter, almost amberbrown. Similar also to H. p. pittieri Cherrie of extreme southwestern Costa Rica, (Type locality Boruca and Terraba), and western Panama, but slightly smaller and with pileum duller (chestnut-brown to chestnut in H. p. pittieri); back, rump, and wings duller, less intensely reddish brown; chest and breast equally pure white.

Range.— Eastern and northern Costa Rica northwards to Guatemala. (Birds from so far north as Guatemala seem better referred here, than to true H. prostheleuca, which in its extreme form is restricted to southern Mexico).

Measurements.— Adults only. Sexes apparently similar in size.¹ Henicorhina prostheleuca prostheleuca (Sclater). Mexico (Vera Cruz, Motzorongo, Presidio, Orizaba and Buena Vista). Wing, 52 (50–57); tail feathers, 23.8 (20–28); tarsus, 21.7 (21–23); culmen to base of forehead, 16.5 (16–18). Thirty-one specimens.

Henicorhina prostheleuca tropaea nobis. Costa Rica (Tenorio, Cerro Sta. Maria, La Vijagua, Juan Vinas and Carrillo). Wing, 53.1 (50–57); tail feathers, 21.9 (20–25); tarsus, 22.6 (21–24); culmen to base of forehead, 17.2 (16–19). Seventy specimens.

Henicorhina prostheleuca pittieri Cherrie, Southwest Costa Rica (Boruca, El General, Buenos Aires and Lagarto). Wing, 58 (56-61); tail feathers, 26.2 (22-31); tarsus, 22.8 (21-25); culmen to base of forehead, 18 (16-19). Nineteen specimens.

Hylorchilus sumichrasti (Lawrence).

Thirty-eight, $\sigma \sigma$, $\varphi \varphi$; Presidio, March, April, May.

Sumichrast's Wren is one of the rarest and most local of all North American birds, previously known only from three specimens. It formed the special object of Brown's visit to the region.

Writing under date of 19 April, 1925, Mr. Brown says,

Have a nice series of the Wood Wren, *Hylorchilus sumichrasti*. *Had hard* work to find it. I hunted thoroughly in the locality where Nelson said he took his but without success. It is a very interesting looking wren and to me it looks like a giant Winter Wren. It is nearly the size of a Cactus Wren and is very local in its distribution.

In another letter a month later he writes,

Discovered a new collecting ground for the wren where my guide and I collected 18 specimens and a fine set of eggs. The nest was located in a crevice in the roof of a cave. The cave was high up in the mountains in the thick primeval forest where there had been a tremendous upheaval in the past, for the slope was wild, rough and broken — immense rocks as large as a fair-sized house had to be climbed and deep, pit-like depressions avoided.

In addition to the set of eggs mentioned, Brown sent in the nest from which they were taken and two other nests without eggs. In all cases the nests are bulky, composed of soft material, grasses, rootlets, leaves, and moss, thickly lined with plant down, feathers, and in one a large piece of rabbit's fur.

Nest 1 contained three white eggs measuring 23 x 17; 23.5 x 17;

¹ In the large series measured, no differences were noted in size correlated with sex as determined by the collectors of the specimens.

23.7 x 17 mm. "Nest and eggs were taken near Presidio May 6, 1925, from a crevice in the roof of a cave in the primeval forest high in the mountains."

Nest 2. "Nest in a crevice in the side of a large rock in shady, humid forest in the mountains. Contained three white eggs on the point of hatching,—too far gone to save. May 17, 1925. Altitude about 2000 feet?"

Nest 3. "— in a crevice in the side of a large rock high up in the mountains, in shady, humid, primeval forest. Contained three white eggs too far advanced to save. May 20, 1925. Alt. 2000??"

From the above it will be seen that Sumichrast's Wren is found in heavy humid forest, whose floor is strewn with large rocks, in the crevices of which the birds build their nests, laying normally three white eggs about the first of May.

Unfortunately Mr. Brown's letters do not give us any account of the habits or notes of this rare and extremely interesting species.

MIMIDAE.

Dumetella carolinensis (Linné).

One, ♂; Presidio, 21 March.

POLIOPTILIDAE.

Polioptila caerulea caerulea (Linné).

One, ♂; Motzorongo, 29 January.

TURDIDAE.

TURDUS GRAYI GRAYI Bonaparte.

Eight, ♂♂, ♀♀; Presidio and Motzorongo, February, March, April, May.

Hylocichla ustulata swainsoni (Cabanis). One, ♂; Presidio, 6 May.

VIREONIDAE.

VIREOSYLVA FLAVOVIRIDIS FLAVOVIRIDIS Cassin. Five, ♂♂♂♂,♀; Presidio, April, May.

VIREOSYLVA PHILADELPHICA Cassin. Two, ♂♂; Presidio, 10 May.

VIREOSYLVA GILVA SWAINSONII (Baird).

One, Q; Presidio, 4 May.

VIREO GRISEUS GRISEUS (Boddaert).

One, 7; Presidio, 9 March.

VIREO BELLII BELLII Audubon.

One, 9; Presidio, 6 May.

PACHYSYLVIA DECURTATA DECURTATA (Bonaparte).

One, ♂; Presidio, 21 April.

The form inhabiting Costa Rica and Panama is considered valid and recognized under the name of *P. d. pusilla* (Lawrence). It differs from true *P. d. decurtata* (Bonaparte) (Type locality Guatemala) in being more yellowish green on the back, crown paler grey and less sharply defined posteriorly.

Size is not a constant character on which to base a separation in this species, since measurements of specimens from Vera Cruz to southern Costa Rica are fairly constant. Two males from Panama are smaller, but in both cases the sexing cannot be relied upon, since two "females" from Panama are larger than either of the "males."

PACHYSYLVIA OCHRACEICEPS OCHRACEICEPS (Sclater). One, ♂; Presidio, 29 April.

VIREOLANIUS PULCHELLUS PULCHELLUS Sclater and Salvin. One, 7; Presidio, 30 April.

CYCLARHIS FLAVIVENTRIS FLAVIVENTRIS Lafresnaye. Three, 33; Presidio and Motzorongo, February, March, May.

MNIOTILTIDAE.

MNIOTILTA VARIA (Linné).

One, ♀; Motzorongo, 1 February.

DENDROICA MAGNOLIA (Wilson).

Two, 9 9; Presidio, 22 March, and Motzorongo, 1 February.

DENDROICA VIRENS VIRENS (Gmelin).

One, ♂; Presidio, 15 March.

SEIURUS NOVEBORACENSIS NOTABILIS Ridgway. One, ♀ ; Presidio, 21 May.

ICTERIA VIRENS VIRENS (Linné).

Two, 33; Presidio and Motzorongo, 26 March, 27 February.

WILSONIA PUSILLA PUSILLA (Wilson).

One, Q; Motzorongo, 7 February.

SETOPHAGA RUTICILLA (Linné).

Three, ♂♂,♀; Presidio and Motzorongo, 10 February, 9 March, 29 April.

EUTHLYPIS LACHRYMOSA LACHRYMOSA Cabanis. Two, ♂,♀; Presidio, 6 March, 30 April.

BASILEUTERUS CULICIVORUS CULICIVORUS (Lichtenstein). Three, J.J., & ; Presidio and Motzorongo, February, May.

FRINGILLIDAE.

GUIRACA CAERULEA LAZULA (Lesson).

One, Q; Presidio, 21 March.

CYANOCOMPSA CYANOIDES CONCRETA (DuBus). Two, 9 9 ; Presidio and Motzorongo, February, March.

CYANOCOMPSA PARELLINA PARELLINA (Bonaparte). Three, J.J., &; Presidio and Motzorongo, February, March.

ORYZOBORUS FUNEREUS Sclater.

One, ♀; Motzorongo, 7 February.

Sporophila morelleti morelleti (Bonaparte).

Seven, $\sigma \sigma$, $\varphi \varphi$; Presidio and Motzorongo, February, March, May.

VOLATINIA JACARINI ATRONITENS Todd. Two, ♂♂; Presidio and Motzorongo, 1 May, 25 February.

CARYOTHRAUSTES POLIOGASTER POLIOGASTER (DuBus). Two, ♂,♀; Presidio, 11 March, 12 May.

SALTATOR ATRICEPS ATRICEPS Lesson.

Nine, $\sigma \sigma$, $\varphi \varphi$; Presidio and Motzorongo, February, May.

SALTATOR MAGNOIDES MAGNOIDES Lafresnaye. Three, 33; Motzorongo, February.

SALTATOR GRANDIS (Lichtenstein). One, ♀ ; Presidio, 25 March.

AIMOPHILA RUFESCENS RUFESCENS (Swainson). One, 7; Presidio, 27 March.

MELOSPIZA LINCOLNII LINCOLNII (Audubon). Two, 377; Presidio and Motzorongo, 2 February, 21 March.

PASSERINA CIRIS (Linné). Four, 77; Presidio, February, March, April.

ARREMONOPS RUFIVIRGATUS CRASSIROSTRIS Ridgway. Three, \Im \Im ; Presidio and Motzorongo, February, March.

BUARREMON BRUNNEINUCHUS BRUNNEINUCHUS (Lafresnaye).

Two, $\varphi \varphi$; Presidio, 25, 29 March.

The two specimens have dark brown crowns which we are unable to match in the M. C. Z. series from anywhere within its wide distribution. We thought at first that they might represent a new form confined to the extreme northeastern part of the range of the species, but a single specimen taken by Nelson and Goldman at Motzorongo, 5



1927. "Birds from the Rain Forest Region of Vera Cruz." *Bulletin of the Museum of Comparative Zoology at Harvard College* 67, 471–487.

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