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SEVEN NEW SUBSPECIES OF VENEZUELAN BIRDS

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Study of the material in our collection has revealed these apparently new forms which we consider worthy of description. Specimens listed are in the Phelps Collection, Caracas, unless otherwise specified.

Names of colors are capitalized when direct comparison has been made with Ridgway's "Color Standards and Color Nomenclature," 1912.

*Celeus elegans deltanus*, new subspecies

*Type*: From Jobure, Río Jobure, Territorio Delta Amacuro; sea level. No. 49,671, Phelps Collection, Caracas, Venezuela. Adult male collected February 22, 1950, by Ramón Urbano. (Type on deposit at the American Museum of Natural History.)

*Diagnosis*: Closest to *C. e. hellmayri*, from which it differs by having the top of head dark brown instead of light brown or cinnamon; from *leotaudi* it differs similarly and, besides, has a longer wing; from *jumana*, from Venezuelan localities, it differs in having a lighter crown, longer crest, a darker, more brownish, less reddish, body, and in having the rump, flanks, and under wing coverts paler, more whitish sulphur yellow, less ochraceous yellow.

*Range*: The Delta of the Orinoco River.

*Description of Type*: Top of head Chestnut, paler on crest; back Chestnut; uropygium Maize Yellow, upper tail coverts tipped or edged with brownish; sides of head Chestnut; wide malar streak Carmine. Chin and throat paler than Chestnut, merging into the Bay of breast, which merges into the Chestnut of abdomen and under tail coverts; flanks partly yellowish white with wide dusky bars; axillaries yellowish white. Primaries Fuscous; outer webs, except those of the external primaries, chestnut; inner webs barred basally with whitish and buffy chestnut; secondaries chestnut, barred on inner vanes basally with whitish buff and dusky; upper wing coverts chestnut, with indistinct dusky bands and very small inconspicuous buffy spots on shafts; bend

of wing brownish, dusky, and whitish; under wing coverts creamy white, primary ones with large dusky spots. Tail brownish black.

Bill (in life) "lemon yellow"; feet "grayish green"; iris "red". Wing, 161 mm.; tail, 106; exposed culmen, 28; culmen from base, 34; tarsus, 24.

*Remarks:* The sexes are similar in coloration, except that the female lacks the Carmine malar streak. Size similar to that of *hellmayri*. Range of measurements: five adult males from Jobure—wing, 156-165 (161.4) mm.; tail, 93-108 (101.8); culmen from base, 32-36 (34.6); five adult females from Jobure—wing, 152-162 (155); tail, 94-108 (100.4); culmen from base, 30-35 (32.8). Measurements of *hellmayri*: five males from British and Dutch Guiana—wing, 147-166 (158.6); tail, 89-105 (97.8); culmen from base, 31-34 (32.6); four adult females from British Guiana (1) and the State of Bolívar (3)—wing, 162-167 (164.5); tail, 94-100 (97.5); culmen from base, 32-34 (33).

Friedmann<sup>1</sup>, after studying 150 specimens of both *C. elegans* and *C. jumana*, comments on the possibility of their being conspecific, as follows: "These color variations are not peculiar to *C. j. jumana* but occur also in *C. j. citreopygius* and in the forms of *C. elegans*. With regard to the latter group, it seems best to continue to consider it as a specifically distinct entity with its markedly pale crest easily setting it off from the *jumana* group."

The discovery of this new subspecies from the Orinoco Delta, with the crest intermediate in color between *C. elegans hellmayri* and *C. j. jumana*, bridges the up to now apparent difference that up to now separated the two former "species". We have been unable to find specimens or records which might indicate that *C. jumana* and *C. elegans* occur together.

#### *Specimens Examined*

*C. elegans approximans*.—BRAZIL: Serra da Lua, 4 ♀<sup>2</sup>; Obidos, 1 ♂<sup>3</sup>, 7<sup>4</sup>.

*C. elegans elegans*.—FRENCH GUIANA: Pied Saute<sup>3</sup>, 1 ♂, 1 ♀; Approuage, 2 ♂<sup>3</sup> Ipousin River, 1 ♀<sup>3</sup>; "Cayenne", 2 (?)<sup>3</sup>; "French Guiana", 11<sup>4</sup>; Upper Cirucana, 1<sup>4</sup>.

*C. elegans hellmayri*.—DUTCH GUIANA<sup>3</sup>: Paramaribo, 3 ♂; Interior of Surinam, 3 ♂. BRITISH GUIANA: Potaro River, 1 ♂<sup>3</sup>; Tumatumari River, 1 ♂<sup>3</sup>; Kamarang River, 1 ♂<sup>3</sup>; "Demarara", 1 ♂<sup>5</sup>, 1 (?)<sup>3</sup>; "British Guiana", 1 ♂<sup>3</sup>, 1 ♀<sup>3</sup>, 1 (?)<sup>5</sup>, 1 (?)<sup>6</sup>; Rockstone<sup>2</sup>, 1 ♂, 2 ♀; Mazaruni River<sup>2</sup>, 1 ♂, 2 ♀; Demarara River, 1 ♂<sup>2</sup>; Mawra<sup>2</sup>, 1 ♂, 1 ♀; Oko Mts., 1 ♂<sup>2</sup>; Itabu Creek, 1 ♀<sup>2</sup>. VENEZUELA: Río Alto Arabupti, 1 ♂; La Unión, 1 ♀<sup>3</sup>; "Orinoco", 1 ♂<sup>6</sup>; Río Yuruán, 1 ♂<sup>4</sup> La Paragua, 1 ♀; Cerro Tomasote, 1 ♂, 1 ♀; Los Altos, 1 ♀; Bergantín, 1 ♂; Cerro El Peonía, 1 ♀; Quebrada Bonita, 1 ♀; Guanoco, 1 ♂<sup>3</sup>, 1 ♀; Cristóbal Colón<sup>3</sup>, 2 ♂, 2 ♀; Cerro Azul, 1 ♂.

*C. elegans deltanus*.—VENEZUELA: Misión Araguaimujo, 1 ♂, 1 ♀;

<sup>1</sup>Birds collected by the National Geographic Society's Expedition to Northern Brazil and Southern Venezuela. Proc. U. S. Nat. Mus., Vol. 97, 1948, p. 442.

<sup>2</sup>Specimens in Chicago Natural History Museum.

<sup>3</sup>Specimens in American Museum of Natural History.

<sup>4</sup>Specimens in Carnegie Museum.

<sup>5</sup>Specimens in Philadelphia Academy of Natural Sciences.

<sup>6</sup>Specimens in U. S. National Museum.

Misión San Francisco de Guayo, 4 ♂, 4 ♀; Jobure, 10 ♂ (incl. type), 8 ♀; Río Guanipo, 1 ♀<sup>5</sup>.

*C. elegans leotaudi*.—TRINIDAD: 2 ♂<sup>5</sup>, 2 (♀)<sup>5</sup>, 2 ♀<sup>4</sup>, 1 ♂<sup>5</sup>, 1 ♂<sup>3</sup>, 5 ♀<sup>3</sup>, 1 (♀)<sup>3</sup>.

*C. elegans jumana*.—BRAZIL: Igarapé-Assu, Pará<sup>3</sup>, 1 ♂, 3 ♀; 12<sup>3</sup> (diamantina, Rio Madeira, Santarem, Santa Isabel, Rio Preto, Pará, Teffe, Matto Grosso); Sao Gabriel<sup>6</sup>, 1 ♂; Maranhao, 1 ♀<sup>2</sup>; Santarem, 1 ♂<sup>2</sup>; Aramassa I., 1 (♀)<sup>2</sup>; Boca Rio Castanho, 1 ♂, 1 ♀; Utinga, 2 ♂<sup>3</sup>. COLOMBIA: Maipures<sup>3</sup>, 1 ♂, 1 ♀; Macacuní, 1 ♀. VENEZUELA: Nacientes Río Siapa, 1 ♀; El Carmen, 2 ♀, 1 (♀); Boca Sina<sup>3</sup>, 2 ♂, 1 ♀; Foot of Duida<sup>3</sup>, 1 ♂; Sabana, Alto Río Asisa, 1 ♂, 1 ♀; Cerro Yapacana, 1 ♂<sup>6</sup>; Puerto Yapacana, 2 ♂, 3 ♀, 2 (♀); Las Carmelitas, 2 ♂, 2 ♀; Pica Yavita-Pimichín, 1 ♀; San Fernando de Atabapo, 1 ♂, 1 ♀; Munduapo<sup>3</sup>, 1 ♂, 2 ♀; Caño Cuao, 1 ♀; Sanariapo, 1 ♂; Caño Cataniapo, 3 ♂, 6 ♀, 1 (♀); Salto Pará, 1 ♂, 1 ♀; El Cambur, 1 ♂; Río Nichare, 1 ♂<sup>3</sup>; Suapure, 1 ♀<sup>3</sup>; Santa Rosalia, 1 ♀; Salto Guaiquinima, 1 ♂; Salto María Espuma, 1 ♂; Salto Maisa, 2 ♀; Salto Arebuchí, 1 ♂, 2 (♀); Cerro Paurai-tepui, 1 ♂; Cerro Chimantá-tepui, 1 (♀); Cerro Auyan-tepui, 3 ♀<sup>3</sup>, 2 ♀.

*C. e. citreopygius*<sup>3</sup>.—PERU: Boca Río Curaray, 1 ♂, 1 ♀. ECUADOR: 1 ♂, 1 ♀; E. Ecuador, 6.

*Celeus undatus amacurensis*, new subspecies

*Type*: From Misión San Francisco de Guayo, Territorio Delta Amacuro; sea level. No. 48,035, Phelps Collection, Caracas, Venezuela. Adult male collected February 11, 1949, by Ramón Urbano. (Type on deposit at the American Museum of Natural History.)

*Diagnosis*: Nearest to *C. u. undatus*, from which it differs by darker, more brownish rufous, less yellowish, abdomen, under tail coverts and edges of breast feathers; back and upper tail coverts also darker.

*Range*: Delta of the Orinoco River. Known from Jobure and the type locality.

*Description of Type*: Top of head Orange Cinnamon, feathers of crest lightly barred with dusky; back Amber Brown, heavily barred with black; uropygium Sudan Brown prominently barred with blackish; sides of head uniform with crown, feathers of neck speckled with blackish; malar region Spectrum Red. Chin and throat Orange Cinnamon, speckled with blackish; breast blackish, feathers narrowly edged with Amber Brown, merging into the Amber Brown of abdomen and under tail coverts, both of which are heavily barred with blackish; axillaries cream color. Primaries Natal Brown, paler below, barred on inner vanes with a color near Ochraceous Salmon, more distally towards the outer ones; outer vanes heavily barred with Amber Brown; secondaries Amber Brown, paler below, prominently barred with blackish, uniform with back; upper wing coverts Amber Brown, prominently barred with blackish, uniform with back and remiges. Tail Amber Brown, paler below, heavily barred and extensively tipped with blackish.

Bill (in life) "lemon"; feet "greenish gray"; iris "reddish brown". Wing, 112 mm.; tail, 68 mm.; exposed culmen, 20 mm.; culmen from base, 24 mm.; tarsus, 19 mm.

*Remarks*: The sexes are similar in coloration, except that the female

lacks the red malar area. Size similar to that of *undatus*. Range of measurements: three adult males—wing, 112-115 (114) mm.; tail, 64-73 (68.3); culmen from base, 23-24 (23.3); four adult females—wing, 107-115 (111.7); tail, 65-70 (66.9); culmen from base, 22-25 (23.7). Measurements of five adult males<sup>3</sup> of *undatus* from the Guianas—wing, 108-115 (112.8); tail, 63-72 (68.2); culmen from base, 23-24 (23.6); five adult females—wing, 112-118 (115); tail, 63-72 (68); culmen from base, 23-25 (24.4).

There is great individual variation in the color of top of head and in the absence, presence, or amount of speckling. The species has not previously been recorded from Venezuela.

#### *Specimens Examined*

*C. u. multifasciatus*.—BRAZIL: Utinga, Pará, 3 ♀<sup>3</sup>.

*C. u. undatus*.—VENEZUELA: Altiplanicie de Nuria, 1 ♂; Carabobo, Alto Río Cuyuni, 2 ♀, 1 (♀); Cambore, Caño Uey, 2 ♂. BRITISH GUIANA: Membaro Creek, 1 ♂; Kamarang River, 1 ♂<sup>3</sup>; Potaro Landing, 1 ♀<sup>3</sup>; Kamakusa, 1 ♀<sup>3</sup>; "British Guiana,"<sup>3</sup> 1 ♂, 1 ♀; Tumatumari<sup>3</sup>, 1 ♂, 1 ♀. DUTCH GUIANA (interior)<sup>3</sup>: 1 ♂, 1 (♀). FRENCH GUIANA<sup>3</sup>: Pied Saute, 1 ♀; Tamanoir, 1 ♂.

*C. u. amacurensis*.—VENEZUELA: San Francisco de Guayo, 2 ♂ (incl. type), 3 ♀, 1 (♀); Jobure, 1 ♂, 1 ♀.

#### *Dendrocicla fuliginosa deltana*, new subspecies

*Type*: From Misión Araguaimujo, Territorio Delta Amacuro, Venezuela; sea level. No. 49,714, Phelps Collection, Caracas, Venezuela. Adult male collected February 16, 1949, by Ramón Urbano. (Type on deposit at the American Museum of Natural History.)

*Diagnosis*: Nearest to *D. f. phaeochroa*, from which it differs by a less whitish chin, more nearly uniform with the under parts. Differs from *D. f. barinensis* by being more olivaceous, less yellowish brown, both below and above.

*Range*: Delta of the Orinoco River.

*Description of Type*: Top of head, back, and rump Argus Brown; sides of head more dusky; upper tail coverts darker than Hay's Russet. Chin slightly grayish, merging into the Cinnamon Brown of under parts; under tail coverts darker than Hay's Russet. Remiges Chestnut, primaries broadly tipped, and outermost externally edged, with dusky; upper wing coverts with an olivaceous tint. Tail chestnut, paler below.

Maxilla (in life) "black"; mandible "bluish gray"; iris "dark". Wing, 102 mm.; tail, 87; exposed culmen, 27; culmen from base, 30; tarsus, 25.

*Remarks*: Sexes similar in color, but female smaller. Size similar to that of *phaeochroa*. Range of measurements: five adult males—wing, 102-107 (104.2) mm.; tail, 85-91 (87.6); culmen from base, 30-31 (30.2); five adult females—wing, 91-99 (94.8); tail, 70-83 (78); culmen from base, 27-29 (28). Measurements of *phaeochroa* (from Caño Cataniapo to San Fernando de Atabapo on the upper Orinoco): five adult males—wing, 106-112 (107.8); tail, 87-95 (89.8); culmen from base, 30-32 (30.6); five adult females—wing, 97-101 (98.8); tail, 77-83 (80.2); culmen from base, 28-30 (29.2).

*Specimens Examined*

*D. f. fuliginosa*.—FRENCH GUIANA: 47. DUTCH GUIANA: 47. BRAZIL: 87. VENEZUELA: Altiplanicie de Nuria, 2 ♂, 1 ♀, 1 (♀).

*D. f. rufo-olivacea*.<sup>7</sup>—BRAZIL: 22.

*D. f. atrirostris*.<sup>7</sup>—BRAZIL: 10. BOLIVIA: 5.

*D. f. phaeochroa*.—VENEZUELA: Cerro Uaipán-tepui, 1 ♂; Cerro Auyan-tepui, 1 ♂; Cerro Chimantá-tepui, 1 ♂, 1 ♀; Caño Pácara, 1 (♀); La Paragua, 2 ♂; Raudal Perro, 1 ♀; Cerro Guaiquinima, 1 ♂, 1 ♀; Raudal Capuri, 1 ♂; Cerro Arebuchi, 1 ♂, 1 (♀); Cerro Paurai-tepui, 2 ♀, 1 (♀); Sabana Kirichú, 1 ♀; Santa Rosalía, 1 ♂, 1 (♀); El Cambur, 1 ♂, 1 ♀; Cerro El Negro, 1 ♂; Caño Cataniapo, 2 ♂, 5 ♀, 1 (♀); Isla Ratón, 2 ♂, 1 ♀, 1 (♀); Caño Cuao, 1 ♂; San Fernando de Atabapo, 2 ♂, 3 ♀, 4 (♀); Cerro Yaví, 1 ♂; Las Carmelitas, 1 ♂, 1 ♀; Puerto Yapacana, 1 ♀, 1 (♀); San Carlos, Río Negro, 1 ♂.

*D. f. deltana*.—VENEZUELA: Misión Araguaimujo, 6 ♂ (incl. type), 6 ♀, 1 (♀); Misión San Francisco de Guayo, 1 ♀, 2 (♀); Jobure, 2 ♂, 2 ♀.

*D. f. barinensis*.—VENEZUELA: Santo Domingo, 2 ♂, 3 ♀; Santa Bárbara, Barinas, 1 ♂, 1 ♀; Ciudad Bolívar, 2 ♂, 1 ♀; La Veguita, 2 ♂; Barinitas, 2 ♂, 2 ♀; Turén, 1 (♀).

*D. f. meruloides*.—TRINIDAD<sup>3</sup>: 17 ♂, 12 ♀, 3 (♀). VENEZUELA<sup>3</sup>: Cristóbal Colón, 3 ♂, 6 ♀; Yacua, 1 (♀); Río Neverí, 1 ♂; Quebrada Seca, Sucre, 2 ♂; Montaña del Guácharo (Guácharo), 1 ♀; Los Palmares, 1 ♀; Puerto de la Cruz, 2 ♀; Las Quiguas, 2 ♂; Tucacas, 2 ♂; Las Trincheras, 2 ♀, 1 (♀). VENEZUELA<sup>8</sup>: Estados Sucre, 15; Monagas, 12; Miranda, 15; Distrito Federal, 2; Carabobo, 5; Yaracuy, 2; Falcón, 10; Lara, 1.

*D. f. lafresnayei*.—VENEZUELA: La Sabana, 2 ♂; La Sierra, 2 ♂, 1 ♀, 1 (♀); El Vigía, 2 ♂; Seboruco, 3 ♂; Santa Cruz de Mora, 1 ♂. COLOMBIA<sup>3</sup>: Río Frío, 2 ♀; Puerto Valdivia, 2 ♀; Morritos, 1 ♀; Río Lima, 1 ♂, 1 ♀; Botero, 1 (♀); Honda, 1 ♂; Las Nubes, Santa Marta, 1 ♂, 1 (♀); Valparaíso, 1 (♀); Minca, 1 (♀); "Bogotá", 2 (♀).

*D. f. ridgwayi*.<sup>7</sup>—ECUADOR: 17. COLOMBIA: 4. PANAMA: 12. COSTA RICA: 6.

*Ochthoeca diadema meridana*, new subspecies

*Type*: From Cerro Mesa de Lino, Santo Domingo, Mérida; altitude 2,600 meters. No. 48,845, Phelps Collection, Caracas, Venezuela. Adult male collected November 25, 1949, by Ramón Urbano. (Type on deposit at the American Museum of Natural History.)

*Diagnosis*: Differs from *O. d. diadema*, of Páramo de Tamá and Colombia, by brighter, deeper yellow, underparts; and from *tovarensis*, of the Caracas region, by darker, more dusky, less olivaceous crown.

*Range*: The Andes of Táchira (except Páramo de Tamá), Mérida and Trujillo, in the Subtropical and Temperate Zones at altitudes between 2,000 and 3,050 meters.

*Description of Type*: Crown dusky olivaceous, more blackish than Dark Olive; forehead and anterior part of superciliary streak widely

<sup>7</sup>For localities see Zimmer, Am. Mus. Nov., No. 728, 1934, p. 19.

<sup>8</sup>For list of specimens and localities see: Phelps and Phelps, Jr., Proc. Biol. Soc. Wash., Vol. 62, 1949, p. 115.

Lemon Chrome; posterior part of superciliary streak prominently Picric Yellow; back and uropygium yellower than Saccardo's Olive, more olivaceous on nape; lores prominently black; ear coverts dusky; cheeks olivaceous. Chin and throat whitish mixed with pale olivaceous and yellowish, merging into the pale olivaceous breast, which merges into the paler than Strontian-Yellow abdomen; sides, flanks, and axillaries olivaceous, more dusky on thighs; under tail-coverts yellowish olive. Wings fuscous; secondaries lightly, tertiaries heavily, edged with brownish; remiges lightly bordered basally on inner vanes with whitish; wing coverts lightly edged with olivaceous; outer under wing coverts dusky olivaceous, the inner long ones yellowish white. Tail fuscous.

Bill (in life) "black"; feet "black"; iris "brown". Wing, 63 mm.; tail, 57; exposed culmen, 9; culmen from base, 13; tarsus, 19.

*Remarks:* Sexes alike. Size similar to that of *diadema*. Range of measurements: three adult males—wing, 62-63 (62.3) mm.; tail, 53-57 (54.3); culmen from base, 13-14 (13.7); five adult females—wing, 56-62 (60); tail, 47-55 (50); culmen from base (4), 13-14 (13.5). Measurements of *diadema*: three adult males from Páramo de Tamá—wing, 63-65 (64); tail, 53-56 (54.3); culmen from base, 13-14 (13.3).

An immature specimen differs from the adults in having the yellow of the forehead much restricted; the superciliary stripe paler yellow; the back more rufous; the throat whitish, not yellow; and the abdomen pale yellowish white.

#### *Specimens Examined*

*O. d. tovarensis*.—VENEZUELA: Colonia Tovar<sup>3</sup>, 1 ♂ (type), 2 ♂ juv.; No León, 1 (?).

*O. d. meridana*.—VENEZUELA: El Rincón, Cerro Niquitáz, 2 ♀; Páramo Misisí, 1 ♀; Mesa de Lino, Sto. Domingo, 2 ♂ (incl. type); El Escorial<sup>3</sup>, 2 ♂, 2 ♀, 1 (?); El Muerto, Páramo Aricagua, 1 ♂, 1 (?); Boca de Monte, Pregonero, 1 (?).

*O. d. diadema*.—VENEZUELA: Villa Páez, Páramo de Tamá, 2 ♂, 1 ♀; Párama de Tamá, 1 ♂. COLOMBIA<sup>3</sup>: Choachi, Bogotá, 1 (?); "Bogotá", 5 (?).

*O. d. jesupi*.—COLOMBIA<sup>3</sup>: El Líbano, Santa Marta, 1 (?); San Lorenzo, 1 ♀; Valparaíso, 1 (?).

*O. d. gratiosa*<sup>3</sup>.—COLOMBIA: 7<sup>9</sup>. ECUADOR: 3<sup>9</sup>.

#### *Euscarthmornis granadensis federalis*, new subspecies

*Type:* From No León, Distrito Federal, Venezuela; altitude 2,000 meters. No. 13,183, Phelps Collection, Caracas, Venezuela. Adult female collected May 7, 1941, by Enrique Riera. (Type on deposit at the American Museum of Natural History.)

*Diagnosis:* Differs from *E. g. granadensis*, of Páramo de Tamá and Colombia by whiter, less grayish, breast and by having the buffy eye ring darker, less whitish; from *lehmanni*, of Santa Marta, by lacking the brownish breast; and from *pyrrhops*, of Perú and Ecuador, by less extensive buffy on the ocular, loreal, and frontal regions.

*Range:* Known only from the type locality in the Subtropical Zone.

*Description of Type:* Top of head, sides of neck, ear coverts, back,

<sup>3</sup>For localities see Gilliard, Am. Mus. Nov., No. 1871, 1940, p. 8.

and uropygium yellower than Warbler Green; eye ring and lores Pale Ochraceous-Buff. A blackish area covers chin, anterior throat, and maxillary region; the rest of the throat is whitish, this color merging into the more grayish of the breast, which in turn merges into the white of the abdomen; sides of breast slightly olivaceous; under tail coverts and axillaries yellowish white; thighs dusky. Wings fuscous; remiges narrowly edged outwardly with yellowish green; bend of wing Amber Yellow; under wing coverts yellowish white. Tail Benzo Brown, paler below, the rectrices edged externally with yellowish green.

Bill (in life) "mandible black; maxilla brown with flesh colored tip"; feet "light brown"; iris "light brown". Wing, 43 mm.; tail, 40; exposed culmen, 11; culmen from base, 14; tarsus, 16.

*Remarks:* Size similar to that of *granadensis*. Range of measurements: three adult females of *granadensis* (Almaguer<sup>3</sup> and Cocal<sup>3</sup>, Colombia; Páramo de Tamá, Venezuela)—wing, 44, 45, 45; tail, 38, 43, 39; culmen from base, 15, 14, 13.

#### Specimens Examined

*E. g. federalis*.—VENEZUELA: No León, 1 ♀ (type).

*E. g. granadensis*.—VENEZUELA: Páramo de Tamá (camp), 3 ♂, 1 ♀. COLOMBIA<sup>3</sup>: Sabana Larga, 1 (♀); Santa Elena, Antioquia, 1 ♂; Cocal, Cauca, 1 ♀; Silencio, 1 ♀; Laguneta, 1 ♂, 2 (♀); Almaguer, 1 ♀, 1 (♀); Coast Range, west of Popayán, 1 ♂.

*E. g. lehmanni*.—COLOMBIA: Santa Marta, 1 (♀)<sup>3</sup>.

*E. g. pyrrhops*<sup>3</sup>.—ECUADOR: Loja, 1 ♂, 1 ♀, 1 (♀). PERU: Loma Santa, 1 ♂; La Legía, 2 ♂, 1 (♀); Chachapoyas, 1 ♂, 1 (♀); Levanto, 1 ♂; San Pedro, 2 ♂; Limabomba, 1 ♂.

This conspicuously marked form appears to be extremely rare, for it has escaped the intensive collecting that has taken place in the Mérida and Caracas regions through a century.

#### *Mecocerculus leucophrys parui*, new subspecies

*Type:* From Cerro Parú, Territorio Amazonas; altitude 1,600 meters. No. 46,853, Phelps Collection, Caracas, Venezuela. Adult male collected February 16, 1949, by William H. Phelps, Jr. (Type on deposit at the American Museum of Natural History.)

*Diagnosis:* Differs from all other subspecies of *M. leucophrys* by having a darker back. Closest to *M. l. roraimae*, from which it differs by having the back more brownish olive, less grayish olive.

*Range:* Known only from Cerro Parú in the Subtropical Zone, at altitudes from 1,600 to 1,700 meters.

*Description of Type:* Top of head dusker than Bone Brown; back and uropygium Olive Brown; lores dusky, feathers tipped with whitish; eyelids whitish; a faint whitish superciliary streak; postorbital region dusky; ear coverts and sides of throat whitish. Chin and throat whitish, becoming more grayish on anterior breast, merging into the yellowish olivaceous of rest of breast, sides, flanks, and thighs; abdomen yellowish white; under tail coverts paler; axillaries whitish. Wings Bone Brown; inner vanes of remiges narrowly edged with whitish, inwardly more extensively; secondaries edged on outer vanes with buff; tertiaries edged broadly with white; two broad buffy wing bands, becoming more whitish inwardly; lesser upper wing coverts uniform with back; under wing

coverts mixed dusky, yellowish, and whitish. Tail darker than Benzo Brown, paler on under surface, faintly tipped with grayish; outer rectrices paler.

Bill (in life) "blackish brown"; feet "blackish brown"; iris "brown". Wing, 64 mm.; tail, 61; exposed culmen, 10; culmen from base, 14; tarsus, 20.

*Remarks:* Sexes alike in coloration, but female smaller. Size similar to that of *roraimae*. Range of measurements: five adult males—wing, 61-64 (62.4) mm.; tail, 59-61 (60.2); culmen from base, 13-14 (13.4); one adult female—wing, 56; tail, 55; culmen from base, 13. Measurements of topotypical *roraimae*: five adult males—wing, 62-63 (62.4); tail, 60-63 (61.6); culmen from base, 13-14 (13.4); five adult females—wing, 57-58 (57.4); tail, 55-58 (56.2); culmen from base, 12-13 (12.8).

#### *Specimens Examined*

*M. l. leucophrys*<sup>3</sup>.—ARGENTINA: 19. BOLIVIA: 9. PERU: 4.

*M. l. brunneomarginatus*<sup>3</sup>.—PERU: 4. ECUADOR: 32.

*M. l. notatus*<sup>3</sup>.—COLOMBIA: 37.

*M. l. setophagoides*<sup>3</sup>.—COLOMBIA: 37.

*M. l. gularis*.—VENEZUELA<sup>10</sup>: Estado Táchira, 33; Edo. Mérida, 20, 8<sup>3</sup>; Edo. Trujillo, 38; Edo. Lara, 3.

*M. l. palliditergum*.—VENEZUELA<sup>10</sup>: Edo. Yaracuy, 1; Edo. Carabobo, 2; Edo. Aragua, 6; Distrito Federal, 27, 11<sup>3</sup>; Edo. Miranda, 3.

*M. l. nigriceps*.—VENEZUELA: Edo. Sucre, 6<sup>3</sup>; Edo. Monagas, 16<sup>10</sup>.

*M. l. roraimae*.—VENEZUELA: Cerro Roraima, 8 ♂<sup>3</sup>, 6 ♂, 24 ♀<sup>3</sup>, 15 ♀, 2 (?); Cerro Uei-tepui, 2 ♂; Cerro Ptari-tepui, 9 ♂, 13 ♀, 4 (?); Cerro Sororopán-tepui, 2 ♀, 1 (?); Cerro Chimantá-tepui, 4 ♂, 4 ♀, 5 (?); Cerro Uaipán-tepui, 1 ♀, 2 (?); Cerro Aprada-tepui, 5 ♂, 5 ♀, 2 (?); Cerro Auyan-tepui, 1 ♂, 1 ♀; Cerro Yaví, 5 ♂, 5 ♀, 1 (?); Cerro Duida<sup>3</sup>, 15 ♂, 12 ♀, 4 (?). BRAZIL: Cerro Uei-tepui, 1 ♀.

*M. l. parui*.—VENEZUELA: Cerro Parú, 9 ♂ (incl. type), 1 ♀.

#### *Oryzoborus crassirostris magnirostris*, new subspecies

*Type:* From Misión San Francisco de Guayo, Territorio Delta Amacuro; sea level. No. 48301, Phelps Collection, Caracas, Venezuela. Adult male collected January 30, 1949, by Ramón Urbano. (Type on deposit at the American Museum of Natural History.)

*Diagnosis:* Differs from *O. c. crassirostris* in having a much larger bill and longer wing and tail; from *O. c. nuttingi*, in having a white speculum.

*Range:* Known from Trinidad, the Delta of the Orinoco, the Lower Caura River, and Caicara on the Orinoco River.

*Description of Type:* Body lustrous black with bluish reflections on the upper parts; axillaries white. Wings brownish black, with a prominent, large, exposed, white speculum on the primaries; bend of wing and under wing coverts white, mixed with dusky. Upper surface of tail blackish brown, under surface browner.

Bill (in life) "horn color"; feet "black"; iris "dark". Wing, 74 mm.; tail, 64 mm.; exposed culmen, 16 mm.; culmen from base, 20 mm.; tarsus, 19 mm.

<sup>10</sup>For localities see Phelps and Phelps, Jr., Ten New Subspecies of Birds from Venezuela. Proc. Biol. Soc. Wash., Vol. 60, 1947, p. 158.



*Remarks:* Sexes different in color. Size larger than that of *crassirostris*. Range of measurements: eight adult males (2 Delta, 3 Trinidad<sup>3</sup>, 3 Caicara<sup>3</sup>)—wing, 73-74 (73.4) mm.; tail (2 only), 64, 65; culmen from base 18-20 (18.6); one adult female—wing, 71; tail, 63; culmen from base, 18. Measurements of *crassirostris*: twenty adult males<sup>3</sup>—wing, 66-73 (68.7); tail (8 only), 55-61 (57.6); culmen from base, 15-16 (15.4); six adult males—wing, 66-70.5 (67.5); tail, 53-62 (58); culmen from base, 16-16.5 (16.1); four adult females—wing, 65.5-67 (66.4); tail, 54-57 (55); culmen from base, 15-16 (15.7).

From the measurements given above, it is seen that the males of the new form have the bill 20% longer, the wing 8% longer, and the tail 12% longer; the depth and width of the bill are also much greater.

The female (No. 50,030, Phelps Collection) is similar in coloration to that of *crassirostris*, but larger, with wing, 71 mm.; tail, 63; culmen from base, 18, against the mean measurements of the four ♀ *crassirostris*; viz. wing, 66.4 tail, 55; culmen from base, 15.7.

One of two immature males in the Phelps Collection is black, with just a few brown feathers showing their tips on breast, abdomen, back and upper wing coverts; the other is in the juvenile plumage, similar to that of the female.

Hellmayr<sup>11</sup> called attention to the large bills of the Trinidad and Orinoco Valley birds, but remarked that he had "not been able to correlate certain variations in dimensions and in size of bill with geographic areas."

Among the 26 adult male *crassirostris* and the 8 adult males of the new form there is only one overlap in wing length (the Bogotá specimen), but none in length of bill. There is no overlap in length of tail among the 6 male *crassirostris* and the 2 males of the new form measured by us.

Mr. J. B. Macdonald, Curator of Birds in the British Museum, kindly measured the three specimens from Trinidad in that institution, with this result: 1 ♂, wing unflattened, 73 mm., culmen from base, 19; 1 ♂ wing, 72, culmen, 18; 1 ♀, wing, 71, culmen, 15. All of these measurements, except that of the bill of the ♀, are typical of the new form.

The known ranges of the new form and of *O. c. crassirostris* approach each other closely in the Caicara region and in the Delta. At the time the Delta specimens of *O. c. crassirostris* were collected, large flocks were feeding on the rice fields. Outside of the breeding season, the birds band together and evidently wander far in search of rice and other ripe grains; they may then approach or even temporarily invade the territory occupied by a neighboring form. In this case the two forms have not been recorded from the same locality.

#### *Specimens Examined*

*O. c. maximiliani*.—BRAZIL<sup>3</sup>: Chapada, Matto Grosso, 2 ♂, 1 ♀; Esperanza, Goyaz, 1 ♀; "Brazil", 1 ♀.

*O. c. crassirostris*.—VENEZUELA: Esuque, 1 ♂<sup>3</sup>; Las Guacas, Río San Felix, 7 ♂<sup>3</sup>; Santa Bárbara de Zulia, 1 ♂; El Vigía, 3 ♂; El Platanal, Terr. Amazonas, 1 ♀; El Palmar, 1 ♀; Río Jobure, Terr. Delta Amacuro, 2 ♂, 4 ♂ juv., 2 ♀, 1 (?). COLOMBIA<sup>3</sup>: "Bogotá",

<sup>11</sup>Catalogue of Birds of the Americas. Part XI, p. 242, 1938.

1 (?); Medellín, 1 ♂; Villavicencio, 1 ♂, 1 ♀. BRITISH GUIANA: Essequibo River<sup>3</sup>, 1 ♂, 1 ♀; Annai<sup>3</sup>, 5 ♂ 1 ♀ juv., 1 [♀]; "Demarara"<sup>6</sup>, 1 (?). DUTCH GUIANA<sup>3</sup>: Paramaribo, 2 ♂, 1 ♂ juv., 3 ♀. BRAZIL<sup>3</sup>: Monte Cussary, 1 ♂.

*O. c. magnirostris*.—VENEZUELA: Misión San Francisco de Guayo, 2 ♂ (incl. type), 2 ♂ juv., 1 ♀; Maripa, 1 ♂<sup>3</sup>; Caicara, 1 ♂<sup>3</sup>; Quiribana de Caircara, 1 ♂<sup>3</sup>. TRINIDAD: 3 ♂<sup>3</sup>.

*O. c. nuttingi*.—NICARAGUA: Nicaragua<sup>3</sup>, 5 ♂, 1 ♂ juv., 2 ♀; Greytown<sup>6</sup>, 3 ♂, 2 ♂ juv.



PLATE IX

LIST OF LOCALITIES

- |                          |                          |
|--------------------------|--------------------------|
| 37 Altiplanicie de Nuria | 46 Chimantá-tepui, Cerro |
| 47 Aprada-tepui, Cerro   | 13 Ciudad Bolivia        |
| 35 Araguaimujo, Misión   | 24 Colonia Tovar         |
| 45 Arebuchi, Cerro       | 68 Cuao, Caño            |
| 45 Arebuchi, Salto       | 30 Cristóbal Colón       |
| 50 Auyan-tepui, Cerro    | 79 Duida, Cerro          |
| 30 Azul, Cerro           | 80 Duida, Foot of        |
| 14 Barinitas             | 61 El Cambur             |
| 25 Bergantín             | 83 El Carmen             |
| 8 Boca de Monte          | 12 El Escorial           |
| 64 Caicara               | 11 El Muerto             |
| 40 Camborere             | 65 El Negro, Cerro       |
| 53 Capuri, Raudal        | 36 El Palmar             |
| 39 Carabobo              | 28 El Peonía             |
| 69 Cataniapo, Caño       | 67 El Platanal           |

- |                                       |                                    |
|---------------------------------------|------------------------------------|
| 19 El Rincón, Cerro Niquitáz          | 24 Puerto de La Cruz, Dto. Federal |
| 4 El Vigía                            | 28 Quebrada Bonita                 |
| 17 Escuque                            | 27 Quebrada Seca, Sucre            |
| 54 Guaiquinima, Cerro                 | 64 Quiribana de Caicara            |
| 55 Guaiquinima, Salto                 | 71 Ratón, Isla                     |
| 32 Guanipa, Río                       | 42 Roraima, Cerro                  |
| 31 Guanoco                            | 76 Sabana, Alto Río Asisa          |
| 34 Jobure                             | 77 Sabana Kirichú                  |
| 34 Jobure, Río                        | 70 Sanariapo                       |
| 57 La Paragua                         | 82 San Carlos, Amazonas            |
| 2 La Sabana                           | 73 San Fernando de Atabapo         |
| 1 La Sierra                           | 33 San Francisco de Guayo          |
| 60 La Unión                           | 9 Santa Bárbara, Barinas           |
| 15 La Veguita                         | 3 Santa Bárbara del Zulia          |
| 75 Las Carmelitas                     | 10 Santa Cruz de Mora              |
| 63 Las Guacas                         | 62 Santa Rosalía, Bolívar          |
| 23 Las Quiguas                        | 7 Santo Domingo                    |
| 22 Las Trincheras                     | 5 Seboruco                         |
| 26 Los Altos                          | 84 Siapa, Nacientes del Río        |
| 29 Los Palmales                       | 78 Sina, Boca de                   |
| 51 Maisa, Salto                       | 41 Sororopán-tepui                 |
| 52 María Espuma, Salto                | 61 Suapure                         |
| 61 Maripa                             | 6 Tamá, Páramo de                  |
| 16 Mesa de Lino                       | 36 Tomasote, Cerro                 |
| 18 Misisí, Páramo de                  | 21 Tucacas                         |
| 29 Montaña del Guácharo<br>(Guácharo) | 20 Turén                           |
| 72 Munduapo                           | 49 Uaipán-tepui                    |
| 27 Neverí                             | 43 Uei-tepui                       |
| 59 Nichare, Río                       | 6 Villa Páez                       |
| 24 No León                            | 30 Yacua                           |
| 48 Pácara, Caño                       | 74 Yapacana, Cerro                 |
| 58 Pará, Salto                        | 74 Yapacana, Puerto                |
| 76 Parú, Cerro                        | 66 Yaví, Cerro                     |
| 44 Paurai-tepui, Cerro                | 81 Yavita-Pimichín, Pica           |
| 56 Perro, Raudal                      | 38 Yuruán, Río                     |
| 41 Ptari-tepui, Cerro                 |                                    |