

## NEW BIRDS FROM SOUTHERN MEXICO

BY PIERCE BRODKORB

THE collections of birds made during 1939 by Eizi Matuda in the valley of the Rio Usumacinta and by Arthur E. Staebler and myself on the Pacific side of Chiapas contain several new forms which are described herewith. In working out these two collections I have been greatly aided by loan of material and in other ways by A. J. van Rossem and by the authorities of the Bureau of Biological Survey, Field Museum of Natural History, and the U. S. National Museum.

*Sterna albifrons staebleri* subsp. nov.

*Type*.—Univ. Michigan Mus. Zool., no. 102,141, ♂ adult; Barra de Cahuacán, Chiapas, sea level; April 12, 1939. P. Brodkorb, orig. no. 14283.

*Characters*.—Differs from *Sterna albifrons mexicana* van Rossem and Hachisuka (Trans. San Diego Soc. Nat. Hist., 8, no. 23: 333, June 15, 1937; Tóbari Bay, Sonora), of Sonora and Sinaloa, in being larger, especially in bill and tail; bill strongly tipped with black; exposed portion of usually only two (instead of three) outer primaries blackish.

From *Sterna albifrons browni* Mearns, of California and Lower California, differs in having a longer bill and tail; bill strongly tipped with black; darker gray back; exposed portion of two (instead of three) outer primaries blackish.

From *Sterna albifrons antillarum* (Lesson) of the Atlantic and Gulf coasts, differs in slightly larger average size; black of pileum extending on to lower hind neck; back much darker gray; under parts suffused with pearly gray.

*Measurements*.—Wing, ♂ 165–171 mm. (♀ 166.5–177); tail, ♂ 81.5–97 (♀ 71–83); exposed culmen, ♂ 28–31 (♀ 26.5–28). Four males and six females measured. *S. a. browni*: wing, ♂ 168–177 mm. (♀ 168); tail, ♂ 71–86 (♀ 69); exposed culmen, ♂ 26.5–28 (♀ 23.5). *S. a. antillarum*: wing, ♂ 164–177 mm. (♀ 160–174); tail, ♂ 73–90.5 (♀ 66.5–79); exposed culmen, ♂ 27–30.5 (♀ 25.5–29.5). According to the describers, *S. a. mexicana* measures as follows: wing, ♂ 162–164 mm. (♀ 160–165); exposed culmen, ♂ 24.6–26 (♀ 24.9–25.2).

*Material examined*.—*S. a. staebleri*: Chiapas (Barra de Cahuacán, 10); *S. a. browni*: California, 6; *S. a. antillarum*: South Carolina 4, Georgia 1, Florida 23, Alabama 2, Texas 1.

*Remarks*.—The North American races of the Least Tern present some curious combinations of characters. *S. a. staebleri* is the largest, while *mexicana*, its closest neighbor geographically, is the smallest; *staebleri* and *mexicana* are the darkest in body color, *antillarum* is the lightest; *staebleri* and *antillarum* usually have only the two outer primaries black and have much black on the tip of the bill; *mexicana* and *browni* usually have little or no black on the bill and three outer primaries black.

This bird is dedicated to my companion, Arthur E. Staebler, in memory of our many pleasant associations in Mexico.

***Tapera naevia major* subsp. nov.**

*Type*.—Univ. Michigan Mus. Zool., no. 102,213; ♂ adult, Tonalá, Chiapas, altitude 50 meters; May 19, 1939. P. Brodkorb, orig. no. 14622.

*Characters*.—Similar to *Tapera naevia excellens* (Sclater) of the Caribbean slope of Mexico and Central America and northwestern South America, but larger-wing in males, 122–127.5 mm. (against 109.5–119 in *excellens*); tail, 179–184.5 (against 158–176.5).

*Range*.—Pacific slope of Central America, from Chiapas to Nicaragua.

*Material examined*.—*T. n. major*: Chiapas (Tonalá 1, Finca Esperanza 1), Salvador (Lake Olomega 3), Nicaragua (San Gerónimo, Chinandega 1). *T. n. excellens*: Veracruz (Minatitlán 1), Tabasco (Teapa 1, Tenosique 6), Guatemala (Gualan, Zacapa 1), Costa Rica (Alajuela 1), Panama (Colon 1, unspecified 1), Ecuador (Puente de Chimbo 2; Milagro, Guayas 1).

***Chordeiles acutipennis littoralis* subsp. nov.**

*Type*.—Univ. Michigan Mus. Zool., no. 102,233, ♂ adult; Arriaga, Chiapas, altitude 56 meters; May 23, 1939. P. Brodkorb, orig. no. 14662.

*Characters*.—Similar to *Chordeiles acutipennis micromeris* Oberholser (Bull. U. S. Nat. Mus., no. 86: 100, April 6, 1914; Xbac, Yucatan), but tail averaging shorter; dusky markings above deeper and more extensive; back and wings more heavily marked with cinnamon and ochraceous; light areas below much more buffy.

Differs from *Chordeiles acutipennis texensis* Lawrence in smaller size; more blackish upper parts; decidedly more buffy coloration both above and below.

Wing (seven males), 165–180 (173.9) mm.; tail, 91–101 (95.4).

*Material examined*.—*C. a. littoralis*: Chiapas (Arriaga 8). *C. a. micromeris*: Yucatan (Progreso 1; Mujeres Island 1; Izamal 1; not specified 3). *C. a. texensis*: California 3, Texas 31, Sonora (Tesia 2; El Álamo 2; Cajeme 3; Guaymas 1; Hermosillo 4; Pilares 1), Chiapas (Barra de Cahuacán 1; Acacoyagua 1; Tonalá 9).

*Remarks*.—The type series was taken from a breeding colony on the boulder-strewn strand of the Rio Arriaga, in the arid western part of the coastal plain. A half-grown juvenile was collected on May 29. All of the adults secured were lean, while migrating *texensis* taken at Tonalá a week or so earlier were exceedingly fat.

***Chloroceryle amazona mexicana* subsp. nov.**

*Type*.—Univ. Michigan Mus. Zool., no. 102,344, ♂ adult; Barra de Cahuacán, Chiapas, sea level; April 11, 1939. P. Brodkorb, orig. no. 14272.

*Characters*.—Similar to *Chloroceryle amazona amazona* (Latham),<sup>1</sup> of South America, but with longer wing and shorter tail, with the proportionate difference between the two greater; reduced or absent white supraloral streak, which in South American birds is usually well marked and extends from bill to eye.

Wing, ♂ 137.5–141.5 mm. (♀ 138–147); tail, ♂ 77–79 mm. (♀ 76–83). Difference

between wing and tail lengths, ♂ 60–63 mm. (♀ 59–65.5). Proportion of  $\frac{\text{tail}}{\text{wing}}$ ,  
♂ 55–56% (♀ 53.9–57.6%).

<sup>1</sup> Type locality Cayenne. The other names applied to this kingfisher were also based on southern material—*Alcedo rubescens* Vieillot from Paraguay, *Alcedo vestita* Dumont from Brazil, and *Chloroceryle leucostrata* Reichenbach from Guiana.

*Range*.—Southern Mexico, south through Central America to Panama and Colombia, where intergrading to *amazona*.

*Remarks*.—Central American birds usually have a decidedly longer wing and have a tendency to a shorter tail than South American specimens, but there is some overlapping in the wing measurements and even more in those of the tail, so that these measurements by themselves are not diagnostic. There is, however, a constant difference in proportion between wing and tail of northern and southern birds. This may be expressed in two ways, either of which is a reliable criterion for determining specimens: by subtracting the tail length from that of the wing, the resultant measurement, showing the actual difference in millimeters between the lengths of the wing and tail, is constantly larger in northern birds; moreover, an index showing the relative proportion of the tail to the wing may be had by dividing the tail length into the wing. The percentage thus obtained is constantly greater in the short-winged, long-tailed southern birds.

Measurements of typical *amazona* are as follows: wing, ♂ 130–135.5 mm. (♀ 129–139); tail, ♂ 78.5–82.5 mm. (♀ 78.5–86). Difference between wing and tail lengths, ♂ 51.5–56.5 mm. (♀ 49.5–55.5). Proportion of  $\frac{\text{tail}}{\text{wing}}$ , ♂ 58.3 to 61.6% (♀ 60.1 to 63.1%).

Both in actual measurements and in proportions birds from Panama and Colombia are intermediate but are closer to the northern birds. A male from British Guiana appears also to be intermediate, but two females from that country are typical *amazona*.

***Chloroceryle americana vanrossemi* subsp. nov.**

*Type*.—Univ. Michigan Mus. Zool., no. 94129, ♂ adult; Finca Esperanza, Chiapas, altitude 145 meters; July 26, 1937. P. Brodkorb, orig. no. 13489.

*Characters*.—Similar to *Chloroceryle americana septentrionalis* (Sharpe), (*Ceryle septentrionalis* Sharpe, Cat. Birds Brit. Mus., 17: 134, 1892; Teapa, Tabasco) of eastern Mexico, but green spots on posterior under parts much smaller and fewer, being confined to the flanks and crissum instead of spreading over the breast and abdomen; pileum more streaked with white. In the female there is an additional difference in that there is just a broken necklace of green spots on the breast in place of the continuous green band of *septentrionalis*. Differs from *C. a. isthmica* (Goldman) (*Ceryle americana isthmica* Goldman, Smithsonian Misc. Coll., 56, no. 27: 1, Dec. 1, 1911; Rio Indio, near Gatun, Canal Zone, Panama), of southern Central America, as from *septentrionalis*; further, the size is larger, the green submalar streak is reduced or absent, the wings are more heavily spotted with white, and the chestnut breast-band of the male is reduced in size. Differs from *C. a. leucosticta* van Rossem and Hachisuka (Condor, 40: 227, Sept. 15, 1938; Rancho La Arizona, near Saric, Sonora), of northwestern Mexico, as from *septentrionalis*, except that the upper parts are much less marked with white. All the South

MEASUREMENTS OF *Chloroceryle amazona*

<i>Males</i>	<i>Wing</i>	<i>Tail</i>	<i>Wing—Tail</i>	$\frac{\textit{Tail}}{\textit{Wing}}$
Chiapas . . . . .	137.5 mm.	77.5 mm.	60 mm.	56.4%
Chiapas . . . . .	139	78.5	60.5	56.5
Chiapas . . . . .	140	77	63	55.0
Guatemala . . . . .	140.5	77.5	63	55.2
British Honduras . . . . .	141.5	79	62.5	55.8
Nicaragua . . . . .	135 molt	71.5 molt	63.5	53.0
Panama . . . . .	135	78	57	57.8
Panama . . . . .	139	80.5	58.5	57.9
Colombia . . . . .	135	77.5	57.5	57.4
Colombia . . . . .	136	77	59	56.6
British Guiana . . . . .	128	73.5	54.5	57.4
Brazil (Marajó I.) . . . . .	133	81.5	51.5	61.3
Paraguay . . . . .	134	82.5	51.5	61.6
Paraguay . . . . .	133	81	52	60.9
Paraguay . . . . .	131	78.5	52.5	59.9
Paraguay . . . . .	135.5	79	56.5	58.3
Paraguay . . . . .	130	78.5	51.5	60.4
Paraguay . . . . .	131	77.5 molt	53.5	59.2
<i>Females</i>				
Veracruz . . . . .	140	78.5	61.5	56.1
Tabasco . . . . .	138	74.5 molt	63.5	54.0
Chiapas . . . . .	147	83	64	56.5
Chiapas . . . . .	139 molt	80	59	57.6
Chiapas . . . . .	143	79.5	63.5	55.6
Chiapas . . . . .	141	76	64	53.9
Guatemala . . . . .	145	79.5	65.5	54.8
Guatemala . . . . .	140	80	60	57.1
Panama . . . . .	136	77.5	58.5	57.0
British Guiana . . . . .	133	81.5	51.5	61.3
British Guiana . . . . .	134.5	81.5	53	60.6
Paraguay . . . . .	134.5	85	49.5	63.1
Paraguay . . . . .	137	84	53	61.3
Paraguay . . . . .	138	86.5	51.5	62.7
Paraguay . . . . .	139	83.5	55.5	60.1
Paraguay . . . . .	139.5	86	53.5	61.6
Paraguay . . . . .	133	81.5	51.5	61.3
Bolivia . . . . .	129	78.5	50.5	60.9

American races are boldly spotted below and have heavy submalar stripes, besides differing in other characters which need not be repeated here.

Wing, ♂ 81–83.5 mm. (♀ 86–87); tail, ♂ 55.5–57.5 (♀ 58.5–60); culmen, ♂ 45.5–47.5 (♀ 44.5–47). Five males and three females measured.

*Range*.—Pacific slope of Chiapas, in Tropical Zone, from Pijijiapan to Acacoyagua.

*Material examined*.—*C. a. leucosticta*: Texas 4, Chihuahua 1, Sinaloa 1, Jalisco 1. *C. a. septentrionalis*: Veracruz (Cuatotolapam 1), Tabasco (Reforma 1; Tenosique 2), Chiapas (Barra de Cahuacán 1), British Honduras (12 miles south of Cayo 3). *C. a. vanrossemi*: Chiapas (Pijijiapan 1; Finca Esperanza 3; Finca Jalapa 2; Acacoyagua 2). *C. a. isthmica*: Costa Rica 1, Panama 9. Also series of *americana*, *cabanisi*, and *mathewsi*.

*Remarks*.—When van Rossem was in Ann Arbor last spring, he saw part of the present series and remarked on their distinctness from *septentrionalis*. Birds since collected confirm these differences. It is therefore fitting to dedicate this new form to one of the outstanding authorities on Middle American birds.

A male taken April 11 at the mouth of the Rio Cahuacán, Chiapas, a few miles from the Guatemalan border, is referable to *septentrionalis*. Whether it represents the breeding form of that locality or is a migrant must be determined by future collecting.

#### *Aulacorhynchus prasinus chiapensis* subsp. nov.

*Type*.—Univ. Michigan Mus. Zool., no. 102,376, ♂ adult; Mount Ovando, Chiapas, altitude 1900 meters; March 6, 1939. P. Brodkorb, orig. no. 13999.

*Characters*.—Similar in bill markings and color of tail spots and crissum to *Aulacorhynchus prasinus stenorhabdus* Dickey and van Rossem (Ibis, (12) 6: 52, 1930; Cerro Los Naranjos, Volcán Santa Ana, Salvador), of the Pacific slopes of Guatemala and Salvador, but larger; pileum, hind neck, and upper back paler and more golden olive, less brownish olive; green of lower rump and upper tail-coverts also lighter and more yellowish.

Wing, ♂ 132–140 mm.; tail, 117–135; culmen, 83–92 mm.

*Range*.—Subtropical Zone of the Sierra Madre in Chiapas, from Mount Ovando to the Volcán de Tacaná, and undoubtedly extending into Guatemala.

*Material examined*.—*A. p. stenorhabdus*: Guatemala (Volcán de Fuego 1), Salvador (Volcán de Santa Ana 1; Los Esesmiles 1; Mount Cacaguatique 1). *A. p. chiapensis*: Chiapas (Mount Ovando 8; Finca Juárez 4; Aguacaliente 1; west slope of Volcán de Tacaná 2).

*Remarks*.—Four adult males of *stenorhabdus* measure as follows: wing, 122–131 mm.; tail, 105.5–118; culmen, 69.5–82. Mr. van Rossem kindly sent to me the measurements of three specimens in the U. S. Biological Survey collection from Pinabete, Chiapas. These are also larger than *stenorhabdus* but are not included with mine on account of the different method of taking measurements.

A specimen from the Volcán de Fuego, Guatemala, is like *stenorhabdus* in size but in coloration is intermediate toward the Chiapas

form. Birds collected in May and June have faded. Otherwise there is not much seasonal variation in color among adult birds. Immature specimens and females measure smaller than adult males.

*Cissilopha yucatanica rivularis* subsp. nov.

*Type*.—Univ. Michigan Mus. Zool., no. 100,542, ♂ adult; Balancán, Tabasco; May 11, 1939. Gregorio Gómez, orig. no. 234.

*Characters*.—In color like *Cissilopha yucatanica yucatanica* (Dubois) from Yucatan, but blue of upper parts somewhat brighter; size decidedly larger.

Wing, 146–158 mm. (against 139–149.5); tail, 177–200 (against 165–176).

*Range*.—Valley of the Rio Usumacinta, in eastern Tabasco and southwestern Campeche.

*Material examined*.—*C. y. yucatanica*: Yucatan (Chichén Itzá 26; not specified 4). *C. y. rivularis*: Tabasco (La Reforma 5; Balancán 3), Campeche (Palizada 2; El Vapor 6).

*Remarks*.—Only fully adult birds with the bill wholly black have been used in the above measurements. Immature specimens with the bill more or less yellow run somewhat smaller in size. Sexing by Matuda's collectors is not entirely reliable; for this reason and because there seems to be only a small average difference in size between males and females, I have not separated the measurements of the sexes in making the diagnosis.

*Heleodytes zonatus vulcanius* subsp. nov.

*Type*.—Univ. Michigan Mus. Zool., no. 102,759, ♂ adult; Aguacaliente, Volcán de Tacaná, Chiapas, altitude 2000 meters; April 2, 1939. P. Brodkorb, orig. no. 14230.

*Characters*.—Similar to *Heleodytes zonatus zonatus* (Lesson), of eastern Mexico and Guatemala, but flanks and crissum more richly colored and entirely unspotted. Differs from *Heleodytes zonatus impudens* Bangs and Peters, of the Isthmus of Tehuantepec, in much smaller size and immaculate flanks and crissum. Differs from *H. z. restrictus* Nelson of Tabasco in smaller size and in having the flanks, abdomen, and crissum paler and without spots or bars.

Wing, ♂ 78.5–82 mm. (♀ 76.5–80.5); tail, 75.5–80 (♀ 78.5–81); culmen, ♂ 22–24 (♀ 21–22.5).

*Material examined*.—*H. z. vulcanius*: Chiapas (Aguacaliente 7). *H. z. zonatus*: Veracruz (Minatitlán 2), Guatemala (Finca Samác 1). *H. z. restrictus*: Tabasco (Balancán 5; Boca del Cerro 2), Campeche (Palizada 8), British Honduras (Cayo 4).

*Dendroica graciae ornata* subsp. nov.

*Type*.—Univ. Michigan Mus. Zool., no. 103,128, ♂ adult; Cerro de la Gineta, Chiapas, altitude 800 meters; May 27, 1939. P. Brodkorb, orig. no. 14708.

*Characters*.—Intermediate in wing length between *Dendroica graciae graciae* Baird of Arizona and *D. g. decora* Ridgway of British Honduras, but with a heavier bill than either; yellow of throat restricted posteriorly as in *graciae*; agrees with *decora* in short tail and in having the upper parts pure gray without the brownish suffusion characteristic of *graciae*; differs from both *graciae* and *decora* in

having the crown and center of the back much more boldly streaked with black, even in the female.

Wing, ♂ 61-65 mm. (♀ 59-61.5); tail, ♂ 44.5-50 (♀ 45-47.5); culmen, ♂ 12.5-13.5 (♀ 12.5-13).

*Material examined.*—*D. g. graciae*: Arizona 19, New Mexico 1, Chihuahua 2. *D. g. decora*: British Honduras 6. *D. g. ornata*: Chiapas (Cerro de la Gineta 12).

*Remarks.*—Several authors, including Ridgway, Griscom, and Hellmayr, have suspected that the name *decora* covered more than one form, but they never had adequate material for comparison. The present fine series of twelve breeding specimens shows that their assumption was correct. The allocation of the Grace's Warbler recorded from Guatemala, Salvador, and Nicaragua is problematical, but the Oaxaca records probably belong to the Gineta form.

*Dendroica graciae graciae* measures as follows: wing, ♂ 64.5-69 mm. (♀ 61.5-67); tail, ♂ 50.5-54.5 (♀ 47.5-54); culmen, ♂ 12-13 (♀ 12-12.5). *D. g. decora* compares as follows: wing, ♂ 59-61.5 mm. (♀ 53-56); tail, ♂ 48-50 (♀ 44-47); culmen, ♂ 12.5-13 (♀ 11.5-12). The heaviness of the bill of the Gineta birds is not adequately expressed by measurements.

*Agelaius phoeniceus matudae* subsp. nov.

*Type.*—Univ. Michigan Mus. Zool., no. 104,607, ♀ adult; Palizada, Campeche; July 26, 1939. Esteban Cruz, orig. no. 1025.

*Characters.*—Differs from *Agelaius phoeniceus richmondi* Nelson, of the coastal district of Veracruz in being smaller; female less reddish-brown above, much whiter (less buffy) below, and with the median crown stripe more distinct.

Measurements of birds from the type locality are as follows: wing, ♂ 107.5-113 mm. (♀ 84-92); tail, ♂ 79.5-85 (♀ 61.5-68.5); culmen, ♂ 23.5-26.5 (♀ 20-21).

*Agelaius phoeniceus richmondi* compares thus: wing, ♂ 113-118 mm. (♀ 93-94); tail, ♂ 84-90 (♀ 69.5-70.5); culmen, ♂ 24-25.5 (♀ 21-21.5).

*Range.*—Valley of the Rio Usumacinta, in Tabasco and Campeche.

*Material examined.*—*A. p. matudae*: Tabasco (La Palma 5; Boca del Cerro 2), Campeche (Palizada 14). *A. p. richmondi*: Veracruz (Minatitlán 6).

*Remarks.*—This new bird is named for my botanist friend, Eizi Matuda, who found time to form a collection of birds among his other duties during his exploration of the Usumacinta.

*Saltator atriceps peeti* subsp. nov.

*Type.*—Univ. Michigan Mus. Zool., no. 103,510, ♂ adult; Pijijiapan, Chiapas, altitude 50 meters; April 29, 1939. P. Brodkorb, orig. no. 14408.

*Characters.*—Like *Saltator atriceps atriceps* (Lesson) in color, but larger in size. Wing, ♂ 128-131 mm. (♀ 121-124); tail, ♂ 120-130 (♀ 117.5-120).

*Saltator atriceps atriceps*, from the Caribbean slope, measures as follows: wing, ♂ 116-126 mm. (♀ 115.5-120); tail, ♂ 111-121 (♀ 114-116). *S. a. raptor* (Cabot) from Yucatan measures: wing, ♂ 116-125 mm. (♀ 110-117); tail, ♂ 118-123 (♀ 108-117.5), and differs in color from *peeti* as it does from *atriceps*.

*Range*.—Pacific slope of Chiapas, from Tonalá to Finca Juárez, above Pueblo Nuevo.

*Material examined*.—*S. a. atriceps*: Tabasco (Balancán 2; Boca del Cerro 1; La Palma 1; Santo Tomás 1), Guatemala (Uaxactun, Petén 2), British Honduras 2. *S. a. raptor*: Yucatan (Chichén Itzá 8; Dzitas 1). *S. a. peeti*: Chiapas (Finca Esperanza 5; Finca Juárez 2; Pijijiapan 1; Tonalá 1).

*Remarks*.—I take pleasure in naming this bird for Dr. Max M. Peet in appreciation of his generous support of our work in Mexico.

*Aimophila rufescens cinerea* subsp. nov.

*Type*.—Univ. Michigan Mus. Zool., no. 103,560, ♂ adult; Cerro de la Gineta, Chiapas, altitude 1000 meters; May 28, 1939. P. Brodkorb, orig. no. 14730.

*Characters*.—As large as *Aimophila rufescens gigas* Griscom, but even paler than *Aimophila rufescens subvespera* Griscom.

From *A. r. subvespera* of Guerrero distinguished by larger size; much grayer back, rump, and upper tail-coverts; paler brown flanks; slightly more whitish throat. From *A. r. gigas*, of the highlands of Guatemala and the adjacent part of interior Chiapas, differs in having the back and posterior under parts ashy gray, brown and black, with scarcely a tinge of the reddish color of *gigas*, and in having the under parts very much paler and grayer. From *A. r. rufescens* (Swainson), of the Atlantic slope of southern Mexico, Guatemala, and Honduras, it differs in color as from *gigas*, although these differences are now even more pronounced; in addition its size is much larger.

Wing, ♂ 80–82.5 mm. (♀ 73.5–77); tail, ♂ 81.5–84.5 (♀ 74–78.5).

*Material examined*.—*Aimophila r. rufescens*: Veracruz (Minatitlán 1), Chiapas (Palenque 3), Guatemala (Vera Paz 1; unspecified 4), Honduras (Cantoral 1; Cerro Cantoral 1). *A. r. subvespera*: Guerrero (Chilpancingo 1; Acahuitzotla 2). *A. r. gigas*: Chiapas (San Bartolomé 2, Valley of Comitán 1), Guatemala (Nebaj 1, Joyabaj 1, Jacaltenango 2, Volcán de Agua 1, unspecified 4). *A. r. cinerea*: Chiapas (Cerro de la Gineta 5).

MEASUREMENTS OF AIMOPHILA

	Males		Females	
	Wing	Tail	Wing	Tail
<i>cinerea</i> . . . . .	80–82.5	81.5–84.5	73.5–77	74–78.5
<i>rufescens</i> . . . . .	73–78 (67–75 fide Griscom)	70.5–77	68–72	63–72
<i>subvespera</i> . . . . .	77 (73–76.5 fide Griscom)	79.5–80	74	76.5
<i>gigas</i> . . . . .	78.5–82 (76–82 fide Griscom)	79.5–85	72–77.5	73.5–79

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