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TWO COLLECTIONS OF BIRDS FROM CAMPECHE, MEXICO

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THE late Percy W. Shufeldt followed a family tradition in ornithology established by his grandfather, Admiral Robert W. Shufeldt, who reported on the birds of the Isthmus of Tehuantepec and Nicaragua following a survey of these areas in 1871. The tradition was continued by his father, the well known ornithologist, Major Robert W. Shufeldt, and his brother, Robert W. Shufeldt 3rd, whose brief but promising career was cut short by death while he was still in his teens.

Percy Shufeldt resided for many years in southern México and northern Central America, where he had chicle and timber interests. His long residence in the lowland forest region permitted him to become very familiar with its bird life. The large and important bird collection which he amassed is noteworthy for the variety of species which it contains, for the care with which the skins were prepared, and for the information on colors of the soft parts. Unfortunately his notes were lost in the hurricane and accompanying tidal wave which devastated Belize in September, 1931. The following year he purchased La Cueva Ranch in Mora County, New Mexico. This he made his home until his death on January 27, 1949, at the age of 71 years and one month.

Later in 1949, his son, Robert W. Shufeldt, generously donated the bird collection, amounting to over 3200 skins, to the University of Michigan Museum of Zoology. For a time, the collection had been stored at the United States National Museum, where Friedmann had access to it for his work on "The Birds of North and Middle America" (Ridgway and Friedmann, 1946; Friedmann, 1950). A few specimens form the basis for records in the Mexican Check-list (Friedmann *et al.*, 1950; Miller *et al.*, 1957); and earlier, Oberholser had examined some of the nighthawks in the course of preparation of his monograph of the group (1914). Still, only a small proportion of the collection has

been studied and reported on. The major segments of the collection and the years in which the specimens were taken are summarized below:

MÉXICO: Veracruz, 1905-09, 1913-15	230	specimens
Oaxaca, 1907-10, 1913-17	511	"
Campeche, 1910-13	807	"
GUATEMALA: Petén, 1917-20, 1925	155	"
BRITISH HONDURAS, 1925-32	649	"
NEW MEXICO: Mora County, 1932-47	795	"

The specimens from British Honduras have been studied by Stephen M. Russell in the course of preparing a major paper on the birds of that colony, and the birds from Oaxaca, nearly all of them collected at Tehuantepec, are being studied by L. C. Binford. The birds from Campeche form the major part of this report. All but a few of these birds were taken at La Tuxpeña. Of the nine other Campeche localities where Shufeldt collected, all but three are readily located: La Reforma (probably the place by that name located just over the border in the state of Tabasco), "Civatuck" (possibly Civiltic), and "Noskal."

The second collection of Campeche material herein reported consists of 192 bird skins collected by Helmuth O. Wagner between October 29 and December 10, 1946, at San José Carpizo, and purchased for the University of Michigan Museum of Zoology in 1948.

According to Wagner, San José Carpizo was an old sisal hacienda of 3500 hectares. At the time of his visit no new sisal had been planted since 1911 and the last of it had disappeared by 1920, the land being largely covered by second-growth forest 25 to 35 years old. Parts of the area were covered with dense scrub, but where the trees were taller some of the undergrowth was dying out. The vegetation was typical of the dry, limestone region—most of the trees and shrubs being leafless during the dry season. The large orchard of the finca and an old cornfield adjacent to tall second-growth were the most productive collecting stations.

Of the many species collected for the first time in Campeche by Shufeldt, a large proportion has since been recorded for that state by others. In the following list of 214 species, only those for which I have found no published records are marked with an asterisk. These amount to 32 species, of which four (*Oxyura dominica*, *Bartramia longicauda*, *Erolia melanotos*, and *Turdus assimilis*) appear to be new to the fauna of the Yucatán Peninsula. The dates of collection are

listed chronologically for each sex, the dates for the males being separated from those of the females by a semicolon. The year of collection has been omitted except in the case of one or two rare migrants when it seemed desirable to show that the species had been collected in more than one season.

ANNOTATED LIST

Crypturellus cinnamomeus subsp. Rufescent Tinamou.

La Tuxpeña: 2 ♂♂, 1 ♀; May 8, 16; August 2. The male taken May 8 is a downy young (wing 38 mm.); eyes light brown, feet and legs orange, bill above fleshy hue, below lighter. The colors of the soft parts of the adult pair are listed as follows: feet and legs vermilion; bill above sepia, below fleshy; eye of male Vandyke brown, eye of female steel gray.

**Podiceps dominicus brachypterus* (Chapman). Least Grebe.

La Tuxpeña: 3 ♂♂, 2 ♀♀; October 29, June 2, 25 (3). La Reforma [? Tabasco]: 1 ♀; April 23. Noskal: 1 ♂; June 4. The male taken October 29 and the female taken April 23 are in fresh nuptial plumage; the others are in adult winter plumage.

**Podilymbus podiceps podiceps* (Linnaeus). Pied-billed Grebe.

La Tuxpeña: 1 ♂; August 28. In early stage of postnuptial molt; wing (arc) 138 mm.

Butorides virescens virescens (Linnaeus). Green Heron.

San José Carpizo: 1 ♀; November 10.

Florida caerulea caerulea (Linnaeus). Little Blue Heron.

La Tuxpeña: 1 ♀; October 3. In immature plumage.

**Cairina moschata* (Linnaeus). Muscovy Duck.

Xbonil: 1 ♀; November 17. Primaries worn; scattered white feathers on head and neck.

Anas discors Linnaeus. Blue-winged Teal.

La Tuxpeña: 1 ♂; November 18. San Felipe: 1 ♂; January 29. The November bird was in an early stage of the tail molt; the tail molt is nearly complete in the January bird, although feathers of the nuptial plumage are not yet apparent on the head and body.

**Oxyura dominica* (Linnaeus). Masked Duck.

La Tuxpeña: 1 "♂!"; January 22. This bird is hen-plumaged. It appears to be the first record of the species for the Yucatán Peninsula.

Elanus leucurus majusculus Bangs and Penard. White-tailed Kite.

La Tuxpeña: 1 ♂; May 16.

Elanoides forficatus yetapa (Vieillot). Swallow-tailed Kite.

Esperanza: 3 ♂♂, 1 ♀; all April 17. These specimens are probably the basis for the records in Friedmann, Griscom, and Moore (1950: 49) and Friedmann (1950: 90).

Ictinia plumbea (Gmelin). Plumbeous Kite.

La Tuxpeña: 2 ♀ ♀; April 11, May 17.

**Accipiter striatus velox* (Wilson). Sharp-shinned Hawk.

La Tuxpeña: 1 ♀; December 9. In first-year plumage.

**Buteo albicaudatus hypospodius* Gurney. White-tailed Hawk.

San José Carpizo: 1 ♀; November 8. In immature plumage. Eye brown.

Buteo magnirostris conspectus (Peters). Insect Hawk.

San José Carpizo: 2 ♂ ♂, 1 ♀; November 4, 25; 3. The female is an adult with wing and tail in molt; eye, white-yellow; lizard in stomach. The males are in immature plumage; eyes in one yellow-gold, in other gray brown; stomach of one contained a spider "big Lycosa."

**Buteo brachyurus fuliginosus* Sclater. Short-tailed Hawk.

La Tuxpeña: ♂; October 31. Adult in dark phase.

Buteo nitidus plagiatus (Schlegel). Gray Hawk.

San José Carpizo: 1 ♂; October 31; adult plumage. La Tuxpeña: 2 ♂ ♂, 2 ♀ ♀; May 19, August 30; May 19, 19. The male taken October 31 is in fresh plumage (wing molt not complete); testes approximately 2 mm.; eye, black brown; stomach contents "Calandria." The male taken August 30 is in fresh juvenal plumage. The immature female taken May 19 is starting to molt into adult plumage. Colors of soft parts of the adult pair taken May 19, and of the immature male are: eyes, dark brown; cere, yellow; bill, horn blue (dark horn blue in immature) above, lighter below.

Hypomorphnus urubitinga ridgwayi (Gurney). Great Black Hawk.

La Tuxpeña: 1 ♀?; March. Immature plumage.

Busarellus nigricollis nigricollis (Latham). Black-collared Hawk.

La Tuxpeña: 1 ♂; March 15. Adult plumage.

Spizaetus ornatus vicarius Friedmann. Ornate Hawk-eagle.

La Tuxpeña: 1 ♂; November 30. Adult plumage.

**Circus cyaneus hudsonius* (Linnaeus). Marsh Hawk.

La Tuxpeña: 1 ♂; February 6. Adult plumage.

**Geranospiza nigra nigra* (Du Bus). Blackish Crane-hawk.

La Tuxpeña: 1 ♂; October 29. Immature plumage. San José Carpizo: 1 ♂; December 2. Immature plumage. The eye of the December bird was yellow-gold; its stomach contained a frog and two lizards.

Herpetotheres cachinnans chapmani Bangs and Penard. Laughing Falcon.

La Tuxpeña: 1 ♂; January 25. San José Carpizo: 1 ♀; November 22. The wings and tail of the female are in molt; eye dark brown; stomach contents, birds.

Micrastur semitorquatus naso (Lesson). Collared Forest-falcon.

La Tuxpeña: 1 ♂; April 5. Adult plumage. "Campeche": 1 sex ?. (No original label.) Immature plumage.

Micrastur ruficollis guerilla Cassin. Barred Forest-falcon.

La Tuxpeña: 3 ♂♂; January 18, May 31, December 28. The December bird is in immature plumage, the two others are in adult plumage. These birds are the basis for Friedmann's record (1950: 575).

Falco rufigularis petoensis Chubb. Bat Falcon.

Chan Laguna, Choapam: 1 ♀? [= ♂ on basis of size]; April 27. La Tuxpeña: 1 ♂, 4 ♀♀; October 11; April 11, May 27, October 3, 8.

Falco sparverius sparverius Linnaeus. American Sparrow Hawk.

La Tuxpeña: 5 ♀♀; October 9 to January 5. San José Carpizo: 2 ♀♀; November 1, 23. The bird taken November 1 had a grasshopper in its stomach; the bird taken November 23 shows molt on the head and body.

Crax rubra rubra Linnaeus. Great Curassow.

La Tuxpeña: 3 ♂♂, 3 ♀♀; May 2, 12, 19; 2, 12, 13. Champotón [Dist.]: 1 ♀; January 29. The January female is in the barred-backed phase, the May 2 female is in the dark phase, and the May 12 female is intermediate between the other two. The May 13 female is a downy young with wing 89 mm. long. These birds form the basis for the records of Ridgway and Friedmann (1946: 16).

Penelope purpurascens purpurascens Wagler. Crested Guan.

La Tuxpeña: 1 ♂; April 13.

Ortalis vetula intermedia Peters. Plain Chachalaca.

La Tuxpeña: 2 ♂♂, 3 ♀♀, 1 sex?; May 11, June 9; February 5, April 26, November 23; December 30. The female taken April 26 is a downy young with wing 65 mm. long.

Colinus nigrogularis caboti Van Tyne and Trautman. Black-throated Bobwhite.

San Dimas: 2 ♂♂; August 8.

Odontophorus guttatus (Gould). Spotted Woodquail.

La Tuxpeña: 2 ♂♂, 4 downy young; all May 8. The young are at most a few days old; the eyes are described as light brown, the feet and legs yellowish, the bill brownish above and below. The eyes of the adult males are brown, the feet and legs, slate blue. One has two and the other one (the opposite one is missing) primaries with whitish tips 20 to 30 mm. long, and there is considerable white at the bases of the next innermost feathers in each case.

Agriocharis ocellata (Cuvier). Ocellated Turkey.

La Tuxpeña: 6 ♂♂, 7 ♀♀, 9 downy young. Champoton [District]: 1 ♀; August 8. In juvenal plumage; wing 206 mm. San José Carpizo: 1 ♂; November 5. Wing still in post-juvenal molt; stomach contents: berries of palms.

The wing lengths of the downy young are as follows: 2 taken May 27, primaries just starting to grow; 1 taken May 28, wing 60 mm.; 1 June 7, 48 mm.; 1 June 11, 57 mm.; and 4 June 12, 107 to 118 mm. The wing of a downy young taken at Laguna Perdida, Petén, Guatemala, on June 2, measures 76 mm. and that of the downy young from La Palma, Tabasco, described by Brodkorb (1943: 31-32) measures 105 mm. These data, plus the statement of Legters (in Leopold, 1948) that nests of wild birds are found in May and early June and the laying season (May and early June) for captive birds in San Diego, California, given by Lint

(1952) indicates that there is little variation in the breeding season of this species.

The fine series from La Tuxpeña also provides information on the molts of the species. A female taken September 25 still has one juvenal rectrix and the wing molt has proceeded to the three outermost primaries. A female taken November 6 and a male with spurs just beginning to grow, taken December 2, are both in the process of molting the wings and tail. Three males with large spurs (26 to 33 mm. long) taken October 6 and November 12 and 24 are in fresh plumage.

Aramus guarana dolosus Peters. Limpkin.

La Tuxpeña: 1 ♀; October 3. San José Carpizo: 1 ♀; November 1.

Aramides cajanea albiventris Lawrence. Gray-necked Wood Rail.

La Tuxpeña: 2 ♂♂, 1 ♀; March 9, April 20; June 9.

**Gallinula chloropus cachinnans* Bangs. Common Gallinule.

La Tuxpeña: 1 ♂; January 25.

Porphyryla martinica (Linnaeus). Purple Gallinule.

Civatuck: 2 ♂♂, 1 ♀; all January 1. 1 in adult plumage, 1 half-way through, and the third nearly through the post-juvenal molt.

Jacana spinosa gymnostoma (Wagler). American Jacana.

La Tuxpeña: 3 ♂♂, 2 ♀♀, May 1, October 1, 27; May 1, October 16. The female taken May 1 is in juvenal plumage; the male taken October 1 is in an early stage of the post-juvenal molt.

Charadrius vociferus vociferus Linnaeus. Killdeer.

La Tuxpeña: 3 ♂♂, 6 ♀♀; October 24 to December 26. San José Carpizo; 1 ♀; November 18. Two birds (taken October 24 and December 14) have down still attached to the central tail feathers.

**Bartramia longicauda* (Bechstein). Upland Plover.

La Tuxpeña: 3 ♀♀; April 9, 1910; April 25, 26, 1911. These appear to be the first records for the Yucatán Peninsula.

Tringa solitaria cinnamomea (Brewster). Solitary Sandpiper.

La Tuxpeña: 1 ♂, 1 ♀; October 1; 26. The female is clearly *cinnamomea*; the male is intermediate between this and the nominate race.

**Capella gallinago delicata* (Ord). Common Snipe.

La Tuxpeña: 1 ♂, 4 ♀♀; October 23; 23, 23, 23, 28.

Erolia minutilla (Vieillot). Least Sandpiper.

La Tuxpeña: 1 ♂; October 11.

**Erolia melanotos* (Vieillot). Pectoral Sandpiper.

La Tuxpeña: 3 ♀♀; May 15, September 28 (2). These appear to be the first records for the Yucatán Peninsula.

Columba flavivrostris flavivrostris Wagler. Red-billed Pigeon.

La Tuxpeña: 1 ♂, 1 ♀; February 23; April 11.

Columba speciosa Gmelin. Scaled Pigeon.

La Tuxpeña: 2 ♂♂, 1 ♀; August 20, November 28; May 18. The male taken November 28 is in the post-juvenal molt.

**Zenaidura macroura carolinensis* (Linnaeus). Mourning Dove.

La Tuxpeña: 2 ♀ ♀; October 17, December 11.

Zenaida asiatica asiatica (Linnaeus). White-winged Dove.

La Tuxpeña: 1 ♀; May 27. San José Carpizo: 2 ♀ ♀; November 1, 24. The November 1 female has nearly completed the post-juvinal molt.

Columbigallina passerina pallescens (Baird). Common Ground-Dove.

La Tuxpeña: 6 ♂ ♂, 4 ♀ ♀; 1 ♀ October, rest December. San José Carpizo: 1 ♀; December 8.

Columbigallina talpacoti rufipennis (Bonaparte). Ruddy Ground-Dove.

La Tuxpeña: 1 ♂, 1 ♀; January 15; May 17. San José Carpizo: 1 ♂; December 9.

Columbigallina minuta interrupta (Griscom). Plain-breasted Ground-Dove.

La Tuxpeña: 1 ♂; January 23. This appears to be the second record of this rare dove for Campeche.

Claravis pretiosa (Ferrari-Perez). Blue Ground-Dove.

La Tuxpeña: 3 ♂ ♂, 4 ♀ ♀; October to February.

Leptotila verreauxi fulviventris Lawrence. White-tipped (White-fronted) Dove.

La Tuxpeña: 1 ♂; December 29. Eye, "Chrome yellow." San José Carpizo: 1 ♂; December 5. Eye, gold.

Aratinga astec astec (Souancé). Astec Parakeet.

La Tuxpeña: 2 ♂ ♂, 6 ♀ ♀, 1 sex?; October 15, November 13; April 5, October 15, November 11, 13 (3); November 11. Eyes of April 5 female "orange yellow." San José Carpizo: 2 ♂ ♂, 3 ♀ ♀; November 2, December 5; November 7, 7, 15. Eyes of 2 females "gold brown," of 2 males "yellow gold" and "gold white." Stomachs of 3 contained berries; gonads small on 1 male and 2 females.

Pionopsitta haematotis haematotis (Sclater and Salvin). Brown-hooded Parrot.

La Tuxpeña: 1 ♀; February 13.

Pionus senilis senilis (Spix). White-crowned Parrot.

La Tuxpeña: 1 ♂, 3 ♀ ♀; October 9; 9, 23, December 8. The male is a young bird with the white crown feathers of the adult plumage beginning to come in.

Amazona xantholora (Gray). Yellow-lored Parrot.

La Tuxpeña: 2 ♂ ♂, 4 ♀ ♀; February 13, 22; 13, 13. September 14, December 28.

Amazona albifrons nana W. deW. Miller. White-fronted Parrot.

La Tuxpeña: 9 ♂ ♂, 4 ♀ ♀, 1 sex?; January 23, 26, May 23, September 9, 13, 13, October 12, 12, November 3; May 28, September 13, October 31, November 8; April 11.

Amazona autumnalis autumnalis (Linnaeus). Yellow-cheeked Parrot.

La Tuxpeña: 1 ♀; October 12.

**Coccyzus americanus americanus* (Linnaeus). Yellow-billed Cuckoo.

La Tuxpeña: 2 ♂ ♂, 1 ♀; May 9, September 30; 30. These are evidently the first-recorded specimens from Campeche; Paynter (1955: 129) reports a sight record of this species from the Banco Campeche.

Piaya cayana thermophila Sclater. Squirrel Cuckoo.

La Tuxpeña: 3 ♂♂, 2 ♀♀; May 17, 28, December 4; October 6, 12. San José Carpizo: 1 ♂, 1 ♀; November 24; December 5. ♂ "Eye red. Stomach, insects."

Crotophaga sulcirostris sulcirostris Swainson. Groove-billed Ani.

La Tuxpeña: 3 ♂♂, 4 ♀♀; April 2, 29, December 23; May 28, December 23, 23, 23. San José Carpizo: 2 ♀♀; November 20, 20. Stomach of one, "Grasshoppers."

Dromococcyx phasianellus rufigularis Lawrence. Pheasant Cuckoo.

La Tuxpeña: 1 ♀; October 8.

**Tyto alba pratincola* (Bonaparte). Barn Owl.

La Tuxpeña: 1 ♂, 1 ♀; July 25; August 10.

Otus guatemalae thompsoni Cole. Vermiculated Screech-owl.

La Tuxpeña: 1 ♂, 1 ♀; May 31; 20.

Glaucidium brasilianum ridgwayi Sharpe. Ferruginous Pigmy-owl.

La Tuxpeña: 7 ♂♂, 1 ♀; March 2, April 4, 5, May 31, July 13, November 22, December 4; May 19. San José Carpizo: 1 ♀; November 15.

**Speotyto cunicularia hypugaea* (Bonaparte). Burrowing Owl.

Esperanza: 1 ♀; January 31. La Tuxpeña: 3 ♀♀; October 17, 25, 27.

Ciccaba virgata centralis Griscom. Mottled Wood-owl.

La Tuxpeña: 4 ♂♂, 3 ♀♀; January 7, 28, March 3, 3; January 18, February 12, November 23.

Nyctibius griseus mexicanus Nelson. Common Potoo.

La Tuxpeña: 4 ♂♂, 1 ♀; February 20, May 9, August 18, 18; February 14.

Chordeiles minor. Common Nighthawk.

The ten examples of this species taken by P. W. Shufeldt at La Tuxpeña were used by Oberholser in preparing his monograph on the genus *Chordeiles* (1914). He assigned them to subspecies as follows:

C. m. minor (Forster). 1 ♂, 1 ♀; September 28; 28.

C. m. chapmani Coues. 1 ♀; September 28.

C. m. aserriensis Cherrie. 1 ♂; 2 ♀♀; September 28; May 8, October 5.

C. m. howelli Oberholser. 1 ♀; May 8.

C. m. henryi Cassin. 2 ♀♀; April 8, September 7.

C. m. hesperis Grinnell. 1 ♀; October 4.

Nyctidromus albicollis yucatanensis Nelson. Parauque.

La Tuxpeña: 9 ♂♂, 8 ♀♀, 2 downy young; February 19, 19, 19, 21, June 3, August 18, October 6, November 27, 29; February 8, 11, 19, 25, May 15, October 4, November 27, December 22; March 13, May 13. San José Carpizo: 1 ♂; November 13. "Eye, black. Stomach, small insects." San Felipe: 1 ♂; January 30.

**Caprimulgus salvini badius* (Bangs and Peck). Tawny-collared Nightjar.

La Tuxpeña: 1 ♂; November 13. "Eyes, dark. Feet and legs, sepia. Bill above, dark sepia, below, same."

Campylopterus curvipennis pampa (Lesson). Wedge-tailed Sabrewing.

La Tuxpeña: 6 ♂♂, 2 ♀♀; January 17, April 26, September 30, November 20, December 8, 20; October 29, 29. San José Carpizo: 1 ♂; November 22. [testes] "2 mm." Stomach "few insects."

Anthracothorax prevostii prevostii (Lesson). Green-breasted Mango.

La Tuxpeña: 2 ♂♂, 1 ♀; February 6, June 11; 11. The males are in immature plumage.

Amazilia candida candida (Bourcier and Mulsant). White-bellied Emerald.

La Tuxpeña: 3 ♂♂; May 27, October 1, December 14. San José Carpizo: 1 ♀; December 6. "Stomach insects."

Amazilia yucatanensis yucatanensis (Cabot). Fawn-breasted Hummingbird.

La Tuxpeña: 1 ♂, 1 ♀; February 13; May 27. San José Carpizo: 1 ♂; November 24. Bill "coral red." Stomach contents "only insects."

Trogon massena massena Gould. Slaty-tailed Trogon.

La Tuxpeña: 1 ♂; May 20. "Eyes light brown. Feet and legs dark slate. Bill orange red. Eyelids salmon."

Trogon citreolus melanocephala Gould. Citreoline Trogon.

La Tuxpeña: 3 ♂♂, 2 ♀♀; April 11, May 4, October 11; May 2, December 16. San José Carpizo: 4 ♂♂, 3 ♀♀; November 1, 4, 24, December 4; 2, 5, 5. Stomachs of four contained "berries," one "caterpillar and berries," and one "a beetle."

Trogon collaris puella Gould. Bar-tailed Trogon.

La Tuxpeña: 3 ♂♂; May 17, July 10, October 16.

Trogon violaceus braccatus (Cabanis and Heine). Violaceous Trogon.

La Tuxpeña: 4 ♂♂, 1 ♀; January 26, June 7, October 8, 30; 27.

Eumomota superciliosa superciliosa (Sandbach). Turquoise-browed Motmot.

San Dimas: 1 ♂; August 8.

Momotus momota (Linnaeus). Blue-crowned Motmot.

La Tuxpeña: 2 ♂♂, 1 ♀; May 31, October 6; 14. San José Carpizo: 2 ♂♂, 5 ♀♀; November 8, 8; 7, 8, 11, 18, 18. Eye "chestnut" in females and young male; "chestnut red" in adult male. Stomach contents "insects" (3), "beetles" (3), "beetles and dragonfly" (1).

The birds from La Tuxpeña have been identified as *M. m. lessonii* (Lesson) by Dr. Dale A. Zimmerman; those from San José Carpizo *M. m. exiguus* Ridgway or *exiguus-lessonii* intergrades.

Pteroglossus torquatus erythrozonus Ridgway. Collared Araçari.

La Tuxpeña: 2 ♂♂, 6 ♀♀; May 29, October 11; May 17, June 7, October 2, 2, 18, November 26. Wings molting on birds taken May 17, 29, and June 7; tails molting, May 29, June 7, October 2 and 11. San José Carpizo: 4 ♂♂, 3 ♀♀; October 31, November 1, 5, 17; 10, 12, 17. Eye "yellow" in all. Stomachs of four contained "berries."

Ramphastos sulfuratus sulfuratus Lesson. Keel-billed Toucan.

La Tuxpeña: 1 ♀; September 28. Young with bill not fully grown.

Picus rubiginosus yucatanensis (Cabot). Golden-olive Woodpecker.

La Tuxpeña: 2 ♂♂, 4 ♀♀; May 17, November 20; October 8, December 8, 9, 14.

Celeus castaneus (Wagler). Chestnut-colored Woodpecker.

La Tuxpeña: 2 ♂♂, 3 ♀♀; January 26, October 8; January 26, May 24, November 13. The wings and tail of the male taken October 8 are in molt.

Dryocopus lineatus similis (Lesson). Lineated Woodpecker.

La Tuxpeña: 1 ♂, 1 ♀; June 4; January 13. San José Carpizo: 2 ♀♀; November 7, December 1. The November bird is in typical male plumage. Stomach contents of both birds "larvae of beetles." Eyes "white."

Centurus aurifrons dubius (Cabot). Golden-fronted Woodpecker.

La Tuxpeña: 4 ♂♂, 8 ♀♀; January 5, October 18, December 14, 30; January 24, May 12, October 6, 16, November 11, 11, 20, December 29. San José Carpizo: 7 ♂♂, 1 ♀; October 31, November 7, 15, 15, 23, December 4, 6; October 31. Stomach contents "berries" (2), "avocates" (1), "berries and insects" (1), "larvae of insects and imagos" (1).

Centurus pygmaeus rubricomus (Peters). Red-vented Woodpecker.

La Tuxpeña: 4 ♂♂, 3 ♀♀, 1 ♀? [= ♂ by plumage]; January 24, May 4; October 27, November 13; May 5, October 9, November 13; June 2.

Veniliornis fumigatus sanguinolentus (Sclater). Smoky-brown Woodpecker.

La Tuxpeña: 2 ♂♂, 2 ♀♀, 1 ♀? [= ♂ by plumage]; April 26, December 8; May 29, October 9; December 20. San José Carpizo: 1 ♂; November 15. [Testes] 6 mm. Stomach contents "larvae."

Dendrocopos scalaris parvus (Cabot). Ladder-backed Woodpecker.

San José Carpizo: 1 ♂; November 19. Eye "chestnut." Stomach contents "larvae of beetles."

Phloeocastes guatemalensis guatemalensis (Hartlaub). Pale-billed Woodpecker.

Nohacal: 1 ♂; June 4. La Tuxpeña: 1 ♂, 3 ♀♀; October 27; 27, November 8, 20. San José Carpizo: 2 ♂♂; November 23, 24. Eye "yellow." Stomach contents "larvae" and "larvae of beetles."

Dendrocincla anabatina typhla Oberholser. Tawny-winged Woodhewer.

La Tuxpeña: 5 ♂♂, 2 ♀♀; January 13, May 24, June 9, October 29, December 20; May 24, 24. This series is pale, like birds from the northern part of the Yucatán Peninsula.

Dendrocincla homochroa homochroa (Sclater). Ruddy Woodhewer.

La Tuxpeña: 4 ♂♂, 4 ♀♀; May 29, October 9, 9, December 20; June 7, October 9, December 9, 16. San José Carpizo: 2 ♂♂; December 2, 9. Eyes: "brown" and "cafe." Stomach contents: "insects" and "insects and larvae of beetles."

Sittasomus griseicapillus gracileus Bangs and Peters. Olivaceous Woodhewer.

La Tuxpeña: 4 ♀♀; May 21, 29, October 9, 11. San José Carpizo: 1 ♂, 1 ♀; November 13; 22.

Dendrocolaptes certhia sancti-thomae (Lafresnaye). Barred Woodhewer.

La Tuxpeña: 6 ♂♂; May 10, 24, December 14, 14, 16, 16.

Xiphorhynchus flavigaster yucatanensis Ridgway. Ivory-billed Woodhewer.

La Tuxpeña: 6 ♂♂, 2 ♀♀; April 26, May 17, July 15, October 10, November 11, December 9; May 24, October 15. San José Carpizo: 5 ♀♀; November 25, December 4, 5, 5. Stomachs of three contained "insects."

Xenops minutus mexicanus Sclater. Plain Xenops.

La Tuxpeña: 1 ♂, 1 ♀, 1 ♀?; May 21; December 9; May 26.

Thamnophilus doliatus yucatanensis Ridgway. Barred Antshrike.

La Tuxpeña: 1 ♂; May 17.

Attila spadiceus flammulatus Lafresnaye. Bright-rumped Attila.

La Tuxpeña: 3 ♂♂, 3 ♀♀; October 9, December 4, 20; May 20, June 9, October 15. Eyes of 2 ♂♂ "liver red." San José Carpizo: 2 ♂♂, 1 ♀; November 18, December 6; November 25. Eyes of ♂♂ "gold red" and "gold," of ♀ "gold yellow." Stomach contents of ♂♂ "insects" and "butterfly with wings each ± 40 mm. and insects."

Pachyramphus major itzensis Nelson. Gray-collared Becard.

La Tuxpeña: 1 ♀; December 14. San Felipe: 1 ♂, 1 ♀; January 30; 30.

Platypsaris aglaiae yucatanensis Ridgway. Rose-throated Becard.

La Tuxpeña: 4 ♂♂; April 4, May 29, July 10, 10. San José Carpizo: 2 ♂♂; November 18, December 2. Stomach contents: "insects" and "caterpillar, 50 mm."

Tityra semifasciata personata Jardine and Selby. Masked Tityra.

La Tuxpeña: 2 ♂♂; April 19, November 6.

Tityra inquisitor fraserii (Kaup). Black-capped Tityra.

La Tuxpeña: 3 ♂♂; May 20, 29, July 6. San José Carpizo: 1 ♀; November 23. Stomach contents: "Tettigoniidae."

Pipra mentalis mentalis Sclater. Red-capped Manakin.

La Tuxpeña: 5 ♂♂, 2 ♀♀; July 27, October 19, 20, 23, November 30; May 22, December 20. Iris "white" or "pure white" in ♂♂, "V. brown" in one ♀.

Pyrocephalus rubinus blatteus Bangs. Vermilion Flycatcher.

La Tuxpeña: 1 ♂; November 21. San José Carpizo: 1 ♂, 1 ♀; November 24; December 6. Stomach contents: "Diptera" and "flies."

Muscivora forficata (Gmelin). Scissor-tailed Flycatcher.

La Tuxpeña: 4 ♂♂, 3 ♀♀; October 14, 15, 15, December 26; October 14, 15, 15.

Tyrannus tyrannus (Linnaeus). Eastern Kingbird.

La Tuxpeña: 1 ♂; April 26. This appears to be the first record for the mainland of Campeche.

Tyrannus melancholicus chloronotus Berlepsch. Tropical Kingbird.

La Tuxpeña: 4 ♂♂, 3 ♀♀; January 15, 22, May 15, December 28; January 15, November 3, 23. San José Carpizo: 1 ♀; November 22.

**Myiodynastes luteiventris luteiventris* Sclater. Sulphur-bellied Flycatcher.

La Tuxpeña: 1 ♂, 3 ♀♀; July 6; April 28, 29, July 11.

Megarynchus pitangua mexicanus (Lafresnaye). Boat-billed Flycatcher.

La Tuxpeña: 5 ♀ ♀; May 20, 25, September 25, November 23, December 16.
San José Carpizo: 1 ♂, 2 ♀ ♀; December 3; November 6, 15.

Myiozetetes similis texensis (Giraud). Vermilion-crowned Flycatcher.

La Tuxpeña: 2 ♂ ♂, 2 ♀ ♀; May 4, October 31; 16, December 11. San José
Carpizo: 1 ♂, 5 ♀ ♀; December 6; October 31, November 13, 16, 24, December 4.
Stomach contents: "berries of big tree," "berries" (2), "insects" (2), and "berries
and some insects."

Pitangus sulphuratus guatemalensis (Lafresnaye). Great Kiskadee.

La Tuxpeña: 4 ♂ ♂, 1 ♀; May 17, August 18, October 16, December 28; November
11. San José Carpizo: 1 ♂, 3 ♀ ♀; November 18; 2, 12, 18. Stomach contents:
"insects" (2) and "berries" (1).

Myiarchus crinitus boreus Bangs. Crested Flycatcher.

La Tuxpeña: 1 ♂, 1 ♀, 1 ♀?; October 14; 1; 2. These birds, which form the
basis for the record in Miller *et al.* (1957: 77), apparently constitute the only record
of this species for Campeche. The ♂ and ♀ have the narrow bills characteristic of
the northern race, *boreus*; the ♀? is larger-billed and may represent the nominate
race or an intermediate population.

Myiarchus tyrannulus cooperi Baird. Brown-crested Flycatcher.

La Tuxpeña: 1 ♀; May 27 (A bob-tailed juvenile). San José Carpizo: 1 ♀;
November 2.

Myiarchus yucatanensis Lawrence. Yucatán Flycatcher.

La Tuxpeña: 3 ♂ ♂, 1 ♀; January 10, May 15, 17; December 11.

Myiarchus tuberculifer platyrhynchus Ridgway. Dusky-capped Flycatcher.

San José Carpizo: 1 ♂, 1 ♀; November 23; 19.

Contopus virens (Linnaeus). Eastern Wood Pewee.

La Tuxpeña: 1 ♂, 1 ♀; October 6; November 5. San José Carpizo: 1 ♂, 1 ♀;
November 2; 3.

Contopus cinereus brachytarsus (Sclater). Tropical Pewee.

San José Carpizo: 1 ♂; November 23.

Empidonax flaviventris (Baird and Baird). Yellow-bellied Flycatcher.

La Tuxpeña: 1 ♀; December 24.

Empidonax minimus (Baird and Baird). Least Flycatcher.

La Tuxpeña: 5 ♂ ♂, 2 ♀ ♀; April 5, October 23, 25, November 5, December
11; October 8, December 26. San José Carpizo: 3 ♂ ♂, 1 ♀, 2 ♀?; November 13,
15, 24; December 2; November 2, December 9.

Onychorhynchus mexicanus mexicanus (Sclater). Royal Flycatcher.

La Tuxpeña: 2 ♂ ♂, 3 ♀ ♀; May 15, June 9; May 18, 29, October 31.

Platyrinchus mystaceus timothei Paynter. White-throated Spadebill.

La Tuxpeña: 1 ♀, 1 ♀?; May 22; November 6.

Tolmomyias sulphurescens cinereiceps (Sclater). Yellow-olive Flycatcher.

La Tuxpeña: 1 ♂, 2 ♀ ♀; May 9; 17, June 21. Iris of ♂ "white," of ♀ "straw white." The label of the ♀ taken May 17 bears the notation "nest and eggs." San José Carpizo: 1 ♀; December 9.

Rhynchocyclus brevirostris brevirostris (Cabanis). Eye-ringed Flatbill.

La Tuxpeña: 1 ♂, 3 ♀ ♀; February 5; 5, May 14, June 14. The label on the June 14 ♀ bears the notation "nest and eggs."

Oncostoma cinereigulare cinereigulare (Sclater). Northern Bentbill.

La Tuxpeña: 5 ♀ ♀; May 17, July 10, September 28, October 2, December 16. San José Carpizo: 1 ♂; November 23. The irides of the October 2 ♀ (juvenile) are described as "light sepia"; those of the December 16 ♀, "straw yellow"; and those of the ♂, "white."

Myiopagis viridicata placens (Sclater). Greenish Elaenia.

La Tuxpeña: 3 ♂ ♂, 1 ♀, 1 sex?; October 9, 31, December 9; January 10; October 9. San José Carpizo: 1 ♂; December 4.

Camptostoma imberbe Sclater. Northern Beardless Flycatcher.

La Tuxpeña: 1 ♀; May 25. San José Carpizo: 1 ♀; December 5.

Pipromorpha oleaginea assimilis (Sclater). Ochre-bellied Flycatcher.

La Tuxpeña: 2 ♂ ♂, 1 ♀; February 10, December 24; November 13.

Progne subis subis (Linnaeus). Purple Martin.

La Tuxpeña: 5 ♂ ♂, 1 ♀; all February 27.

**Progne chalybea chalybea* (Gmelin). Gray-breasted Martin.

La Tuxpeña: 2 ♂ ♂, 2 ♀ ♀; February 27, May 27; February 27, 27.

**Petrochelidon pyrrhonota pyrrhonota* (Vieillot). Cliff Swallow.

La Tuxpeña: 3 ♂ ♂, 1 ♀; April 29, October 6, 6; 6.

**Petrochelidon fulva citata* Van Tyne. Cave Swallow.

San José Carpizo: 1 ♂; December 5.

**Stelgidopteryx ruficollis serripennis* (Audubon). Routh-winged Swallow.

La Tuxpeña: 3 ♂ ♂, 1 ♀; February 6, October 30, December 14; October 30. San José Carpizo: 1 ♂; November 22.

Hirundo rustica erythrogaster Boddaert. Barn Swallow.

La Tuxpeña: 2 ♂ ♂, 1 ♀; April 30, October 6; 30.

Iridoprocne bicolor (Vieillot). Tree Swallow.

La Tuxpeña: 5 ♂ ♂, 5 ♀ ♀, 1 ♀?, 1 sex?; all February 6 or 7.

Iridoprocne albilinea albilinea (Lawrence). Mangrove Swallow.

La Tuxpeña: 1 ♀; February 8.

Cissilopha yucatanica (Dubois). Yucatán Jay.

La Tuxpeña: 7 ♂ ♂, 3 ♀ ♀, 1 sex?; April 19, 19, May 28, June 6, 7, 7, November 20; October 28, 28, November 3; May 5. The May 28 bird is a bob-tailed juvenile; two juveniles with fully-grown tails, taken June 6 and 7, show the begin-

ning of the postjuvinal molt on the legs. San José Carpizo: 3 ♂♂, 2 ♀♀; October 31, November 6, December 5; November 12, 12. Stomach contents: "insects" (1) and "berries" (2).

The seven fully adult birds in this series are highly variable in size (wing: 135–149 mm.; tail: 162–186 mm.) and are intermediate between *rivularis* and the nominate race.

Cyanocorax yncas maya (van Rossem). Green Jay.

La Tuxpeña: 2 ♂♂, 2 ♀♀; April 26, 26; May 16, September 30.

Psilorhinus morio vociferus (Cabot). Brown Jay.

San José Carpizo: 3 ♂♂; November 1, 4, December 3.

Thryothorus albinucha albinucha (Cabot). White-browed Wren.

La Tuxpeña: 2 ♂♂, 1 sex ?; May 18, October 11;— December.

Thryothorus maculipectus canobrunneus Ridgway. Spot-breasted Wren.

La Tuxpeña: 1 ♀?; July 10.

Troglodytes musculus intermedius Cabanis. Southern House Wren.

La Tuxpeña: 2 ♂♂; May 9, 25.

Uropsila leucogastra brachyura (Lawrence). White-bellied Wren.

La Tuxpeña: 2 ♂♂, 2 ♀♀; April 5, December 11; January 10, April 29. San José Carpizo: 1 ♀; November 15. Stomach contents: "Insects—small beetles, flies, and hymenoptera."

Dumetella carolinensis (Linnaeus). Common Catbird.

La Tuxpeña: 1 ♀; November 13. San José Carpizo: 2 ♂♂; November 11, December 1.

Melanoptila glabrirostris glabrirostris Sclater. Black Catbird.

La Tuxpeña: 4 ♂♂, 2 ♀♀; January 25, May 1, 4, November 6; January 26, May 2. San José Carpizo: 1 ♀; November 23. Stomach contents: "small insects."

Mimus gilvus leucophaeus Ridgway. Tropical Mockingbird.

La Tuxpeña: 1 ♀; January 26. Eye, "yellow." San José Carpizo: 1 ♂, 2 ♀♀; November 23; 2, 18. Eye of male "gray-white," of females, "brown." Stomach contents: "berries." The two birds with brown irides are short billed and appear to be birds of the year.

**Turdus assimilis leucauchen* Sclater. White-throated Robin.

La Tuxpeña: 1 ♀; November 6. This is evidently the first specimen taken on the Yucatán Peninsula.

Turdus grayi tanaulipensis (Nelson). Clay-colored Robin.

La Tuxpeña: 2 ♂♂, 1 ♀; May 18, November 13; 28. San José Carpizo: 1 ♂; November 15. Stomach contents: "berries."

Hylocichla mustelina (Gmelin). Wood Thrush.

La Tuxpeña: 1 ♂; November 30.

**Hylocichla ustulata swainsoni* (Tschudi). Swainson's Thrush.

La Tuxpeña: 1 ♂, 1 ♀; October 25; 25.

Polioptila caerulea deppei van Rossem. Blue-gray Gnatcatcher.

La Tuxpeña: 2 ♀ ♀; October 27, December 14. San José Carpizo: 1 ♂; November 22.

Polioptila plumbea superciliaris Lawrence. Tropical Gnatcatcher.

Nohacal: 2 ♂ ♂, 1 ♀; all June 4. La Tuxpeña: 2 ♂ ♂, 1 ♀; December 16, 20; October 2.

Ramphocaemus rufiventris ardeleo Van Tyne and Trautman. Long-billed Gnatwren.

La Tuxpeña: 3 ♂ ♂, 4 ♀ ♀; May 4, 5, October 2; May 17, October 1, 8, 9.

**Anthus spinoletta rubescens* (Tunstall). Water Pipit.

La Tuxpeña: 1 ♀; November 19. This apparently is the second specimen recorded from the Yucatán Peninsula.

Vireo griseus griseus (Boddaert). White-eyed Vireo.

La Tuxpeña: 2 ♂ ♂, 4 ♀ ♀; October 31, November 11; October 26, 30, November 20, February 16. San José Carpizo: 1 ♂, 1 sex ?; November 2; 15. The male was "singing in tree"; its stomach contents were "insects."

Vireo pallens semiflavus Salvin. Mangrove Vireo.

La Tuxpeña: 2 ♂ ♂; January 13, May 16.

Vireo flavifrons Vieillot. Yellow-throated Vireo.

La Tuxpeña: 2 ♀ ♀; November 11, 13. San José Carpizo: 1 ♂; December 6.

Hylophilus ochraceiceps ochraceiceps Sclater. Tawny-crowned Greenlet.

La Tuxpeña: 1 ♀, 1 ♀?; December 8; January 18.

Hylophilus decurtatus decurtatus (Bonaparte). Gray-headed Greenlet.

La Tuxpeña: 2 ♂ ♂, 1 ♀; January 10, April 26; October 27.

Cyanerpes cyaneus carneipes (Sclater). Red-legged Honeycreeper.

La Tuxpeña: 4 ♂ ♂, 1 ♀; May 17, 24, June 2, November 20; June 2. The November male is in adult winter plumage except for two or three blue feathers on the back.

Mniotilta varia (Linnaeus). Black-and-white Warbler.

La Tuxpeña: 1 ♂; February 16. San José Carpizo: 1 ♂; December 2.

Vermivora pinus (Linnaeus). Blue-winged Warbler.

La Tuxpeña: 1 ♂, 1 ♀; February 16; 15.

Parula americana (Linnaeus). American Parula.

La Tuxpeña: 2 ♂ ♂, 2 ♀ ♀; November 13, December 20; January 10, December 30. San José Carpizo: 1 ♂, 1 ♀?; November 24; 18. Stomach contents: "small insects."

Dendroica petechia aestiva (Gmelin). Yellow Warbler.

La Tuxpeña: 1 ♀; May 9. San José Carpizo: 1 ♂ im.; November 23.

Dendroica magnolia (Wilson). Magnolia Warbler.

La Tuxpeña: 1 ♂, 1 ♀, 1 sex ?; December 28; February 16; October 11. San José Carpizo: 2 ♂ ♂, 2 ♂ ♂?, 2 ♀ ♀; November 22, 24; 6, 24; 4, December 5. Stomach contents of five: "insects" or "small insects."

**Dendroica coronata coronata* (Linnaeus). Myrtle Warbler.

La Tuxpeña: 1 ♂, 3 ♀ ♀; October 6; November 6, December 4, 28.

Dendroica virens virens (Gmelin). Black-throated Green Warbler.

La Tuxpeña: 2 ♂ ♂, 8 ♀ ♀; December 4, 24; October 26, November 20, 22, December 16, January 10, 24, February 10, May 5. San José Carpizo: 1 ♂, 1 sex ?; December 5; November 13.

Dendroica dominica albiflora Ridgway. Yellow-throated Warbler.

La Tuxpeña: 1 ♂, 1 ♀ ?; October 29; 31.

Dendroica pensylvanica (Linnaeus). Chestnut-sided Warbler.

La Tuxpeña: 1 ♂; October 14.

Seiurus aurocapillus (Linnaeus). Ovenbird.

La Tuxpeña: 1 ♀; October 7.

**Seiurus noveboracensis notabilis* Ridgway. Northern Water-thrush.

La Tuxpeña: 2 ♂ ♂; May 11, 16. The subspecific determination was made by Dale A. Zimmerman.

Oporornis formosus (Wilson). Kentucky Warbler.

La Tuxpeña: 1 sex?; October 5.

Geothlypis trichas brachidactyla (Swainson). Common Yellow-throat.

La Tuxpeña: 1 ♂; October 23. San José Carpizo: 1 ♂; November 13.

Icteria virens virens (Linnaeus). Yellow-breasted Chat.

La Tuxpeña: 1 ♂, 1 ♀; September 28; 30.

Granatellus sallaei boucardi Ridgway. Gray-throated Chat.

La Tuxpeña: 7 ♂ ♂, 1 ♀; April 30, June 2, July 10, September 28, 30, October 2, 9; September 28. The males taken July 10 and October 9 are in the immature plumage.

Wilsonia citrina (Boddaert). Hooded Warbler.

La Tuxpeña: 3 ♂ ♂; November 13, December 24, February 10.

Setophaga ruticilla (Linnaeus). American Redstart.

La Tuxpeña: 2 ♂ ♂; October 15, February 16. Both are in adult plumage.

Basileuterus culicivorus culicivorus (W. Deppe). Golden-crowned Warbler.

La Tuxpeña: 1 ♂; May 22.

Gymnostinops montezuma (Lesson). Montezuma Oropendola.

La Tuxpeña: 1 ♂, 1 ♀; December 9; 9.

Amblycercus holosericeus holosericeus (W. Deppe). Yellow-billed Caticue.

La Tuxpeña: 1 ♀; May 16.

**Psomocolax oryzivorus impacifus* Peters. Rice Grackle.

La Tuxpeña: 2 ♂ ♂, 3 ♀ ♀; July 6, October 26; February 7, 21, April 2.

Tangavivus aeneus aeneus (Wagler). Red-eyed Cowbird.

La Tuxpeña: 5 ♂ ♂, 2 ♀ ♀; May 18, October 5, 6, 12, December 24; October 6,

14. The five birds taken in October are nearing the completion of the wing molt. San José Carpizo: 1 ♂, 2 ♀♀; November 11; 10, 11. Stomach contents of all three were corn.

Cassidix mexicanus mexicanus (Gmelin). Boat-tailed Grackle.

San José Carpizo: 1 ♀; November 11.

Dives dives dives (W. Deppe). Melodius Blackbird.

La Tuxpeña: 2 ♂♂; May 2, August 2. San José Carpizo: 2 ♂♂, 1 ♀?, 1 sex?; October 15, November 12; December 1; 2. Stomachs of two contained corn.

Icterus spurius (Linnaeus). Orchard Oriole.

La Tuxpeña: 3 ♂♂, 1 ♀; January 10, 10, 13; October 16. San José Carpizo: 2 ♂♂, 2 ♀♀; December 1, 1; November 24, December 8. Stomach contents: "berries and insects" (2) and "insects" (2).

Icterus prothemelas prothemelas (Strickland). Black-cowled Oriole.

La Tuxpeña: 7 ♂♂, 2 ♀♀, 1 sex?; January 10, May 19, October 9, November 22, 22, 28, December 14; November 22, 22; January 10.

Icterus chrysater mayensis van Rossem. Yellow-backed Oriole.

La Tuxpeña: 4 ♂♂, 3 ♀♀; May 17, November 22, 22, 22; February 7, May 17, December 9.

Icterus auratus Bonaparte. Orange Oriole.

La Tuxpeña: 1 ♂; November 22.

Icterus gularis yucatanensis Berlepsch. Black-throated Oriole.

San Dimas: 1 ♂; December 13. La Tuxpeña: 4 ♂♂, 2 ♀♀, 1 sex?; February 10, April 19, May 17, 19; April 5, October 15; April 30. San José Carpizo: 7 ♂♂, 1 ♀; October 31, November 3, 3, 3, 24, December 1, 1; November 3. According to Dale A. Zimmerman, the adult males from San José Carpizo are intermediate between this race and *I. g. tamaulipensis*.

Icterus cucullatus igneus Ridgway. Hooded Oriole.

San José Carpizo: 3 ♂♂, 1 ♀; November 22, 22, 29; 20. Stomach contents of two: "insects" and "small insects."

Tanagra affinis affinis Lesson. Scrub Euphonia.

La Tuxpeña: 1 ♂, 2 ♀♀; November 11; May 29, December 4. San José Carpizo: 1 ♂, 1 ♀; November 15; December 2. Stomach contents: "berries" and "berries of a mistletoe."

Tanagra lauta lauta Bangs and Penard. Yellow-throated Euphonia.

La Tuxpeña: 1 ♂, 4 ♀♀; May 19; April 29, 30, May 16, October 27.

Piranga rubra rubra (Linnaeus). Summer Tanager.

La Tuxpeña: 4 ♂♂, 3 ♀♀; October 15, November 20, December 14, January 5; November 30, 30, December 8.

Piranga roseo-gularis tincta Paynter. Rose-throated Tanager.

La Tuxpeña: 8 ♂♂, 9 ♀♀; April 26, May 2, June 7, October 15, 26, 27, November 13, December 8; January 24, June 2, October 8, 9, 26, December 8, 9, 14, 20.

**Piranga olivacea* (Gmelin). Scarlet Tanager.

La Tuxpeña: 1 ♀; October 12.

Habia rubica nelsoni (Ridgway). Red-crowned Ant-Tanager.

La Tuxpeña: 1 ♀; May 4.

Habia gutturalis peninsularis (Ridgway). Red-throated Ant-Tanager.

La Tuxpeña: 6 ♂♂; February 13, July 10, October 5, 11, 14, 29. The bird taken October 5 is in immature plumage; the adult males taken October 11 and 14 are nearing completion of the annual molt. San José Carpizo: 1 ♂, 2 ♀♀; November 6; December 9, 9. Stomach contents: "insects" and "insects and berries" (2).

Lanio aurantius aurantius Lafresnaye. Black-throated Shrike-Tanager.

La Tuxpeña: 1 ♀; December 16.

Eucometis penicillata pallida Berlepsch. Gray-headed Tanager.

La Tuxpeña: 2 ♂♂, 1 ♀, 2 sex ?; May 17, December 29; January 24; November 23, 24.

Saltator atriceps (Lesson). Black-headed Saltator.

La Tuxpeña: 2 ♂♂, 1 ♀; March 29, August 23; 2. San José Carpizo: 2 ♂♂, 2 ♀♀; November 21, 23; 23, December 1. Stomach contents: "berries" (3) and "beetles and other insects." As a group, these seven birds appear intermediate between the nominate race and *S. a. raptor*.

Saltator coerulescens yucatanensis Berlepsch. Grayish Saltator.

La Tuxpeña: 1 ♂; April 30. San José Carpizo: 1 ♂, 1 ♀?; December 4; November 30. Stomach contents of male: "berries."

Richmondia cardinalis yucatanica (Ridgway). Cardinal.

San Dimas: 1 ♂; December 13.

Pheucticus ludovicianus (Linnaeus). Rose-breasted Grosbeak.

San José Carpizo: 1 ♂; November 22. Stomach contents: "seeds."

Guiraca caerulea caerulea (Linnaeus). Blue Grosbeak.

La Tuxpeña: 2 ♂♂, 1 sex ? [= ♂]; November 6, March 2; 29. San José Carpizo: 1 ♂; undated.

Cyanocompsa parellina parellina (Bonaparte). Blue Bunting.

La Tuxpeña: 9 ♂♂, 2 ♀♀; May 17, 21, 24, June 2, September 28, October 9, 9, November 7, December 28; October 9, November 6. One male taken October 9 is in immature plumage resembling that of the females, but of a darker and duller brown. Two adult males are well into the annual molt: one taken September 28 is bob-tailed and the wing molt has proceeded to the ninth primary; one taken October 9 has the tail approximately two-thirds grown and the sixth through ninth primaries growing. The latter bird has broad brown tips to the blue body feathers, longest and deepest brown on the nape and back. The tipping on the incoming feathers of the September bird is pale and narrow, a rather surprising difference. An adult taken November 7 has completed the molt and shows tipping of an intermediate width, though narrower than the mean of tipping of the two molting birds. An adult taken May 21 still retains considerable brown tipping,

particularly on the back. The brown immature plumage apparently is not carried into the first breeding season; a male taken May 24 is roughly three-fourths through the molt of the body feathers, the incoming blue feathers are virtually without brownish tips, the remiges and rectrices are fully grown and are blue-edged as in the adult. Two males taken February 5 and 8 at Chichén Itzá, Yucatán, and a male taken April 13 at Uaxactun, Petén, Guatemala, are considerably further along in this molt than the May bird from La Tuxpeña, retaining but a few brown feathers on the abdomen and flanks. These three birds all show narrow brown tips on the blue back feathers.

Passerina cyanea (Linnaeus). Indigo Bunting.

La Tuxpeña: 4 ♂♂, 2 ♀♀; November 13, 13, December 30, April 23; October 16, December 26. San José Carpizo: 1 ♂; November 3. Stomach contents: "fine seeds."

Passerina ciris ciris (Linnaeus). Painted Bunting.

La Tuxpeña: 1 ♀; January 15. San José Carpizo: 2 ♂♂, 1 ♀; November 1, 1; December 1. Stomach contents of one male: "seeds."

Tiaris olivacea pusilla Swainson. Yellow-faced Grassquit.

San Dimas: 1 ♂; December 13.

Sporophila torqueola moreletii (Bonaparte). White-collared Seedeater.

La Tuxpeña: 4 ♂♂, 1 ♀; January 6, May 16, June 1, November 28; December 23. The male taken January 6 is in heavy molt (wings, tail, and body plumage) from immature to adult plumage.

Volatinia jacarina splendens (Vieillot). Blue-black Grassquit.

La Tuxpeña: 11 ♂♂, 1 ♀; May 15, 15, 15, 25, 26, June 11, 11, 16, 16, 16, July 17; June 15. Four of the males taken in May are molting.

**Spiza americana* (Gmelin). Dickcissel.

La Tuxpeña: 5 ♂♂, 3 ♀♀; all taken April 27, 1912.

Arremonops rufivirgata verticalis (Ridgway). Olive Sparrow.

La Tuxpeña: 1 ♀?; January 22.

Arremonops conirostris chloronotus (Salvin). Green-backed Sparrow.

La Tuxpeña: 1 ♂, 3 ♀♀, 1 sex ?; May 6; June 2, November 3, 6; June 2.

**Passerculus sandwichensis savanna* (Wilson). Savannah Sparrow.

La Tuxpeña: 1 ♀; November 18.

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