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No. 19

BIRDS FROM THE YUCATAN PENINSULA

BY MELVIN A. TRAYLOR, JR.

In the fall and winter of 1939-40, I made a collection of birds in the states of Yucatan and Campeche in southern Mexico. The trip was made in the company of Mr. E. W. Andrews, who was doing archaeological reconnaissance work for the Carnegie Institution of Washington, and he frequently aided in the collection of specimens.

Collecting was carried on at three stations. Through the courtesy of the Carnegie Institution, we used their headquarters at Chichen Itza, and collecting was done there from October 6 to November 24. From Chichen Itza, we went to Matamoros in southwestern Campeche, and through the kindness of Mr. Cecil Branson, manager of the Laguna Corporation, we made our headquarters there, and collected from December 18 to January 9. From Matamoros we flew to Pacaitun on the Candelaria River, where we were very fortunate in being able to establish our camp in the bodega of Sr. Francisco Rondanini, owner of that "chicle central," and collected there from January 12 to March 1.

The collection, which is deposited in Field Museum, numbers 731 specimens, 287 from northern Yucatan, and 444 from southern Campeche. The species represented are 205 in number, 106 from Chichen Itza, and 167 from Campeche. In the annotated list which follows, I have included twelve species which were seen but not collected, and which raise the Campeche total to 179 species.

I wish to express my thanks and appreciation to Mr. Ludlow Griscom and Mr. James C. Greenway for their kindness and help in the identification of certain species at the Museum of Comparative Zoology; and also to the authorities of that museum and of the Museum of Zoology, University of Michigan, for the loan of valuable comparative material. I am also grateful to Mr. Boardman Conover for the use at all times of his own collections, and for his valuable

aid in the identification of certain game birds; and to Mr. Sydney Camras for his aid in the preliminary identification of many of the birds, and his help in assembling the literature. Particularly, I am indebted to Mr. Rudyerd Boulton and Mr. Emmet R. Blake of Field Museum, without whose constant encouragement and help this paper would never have been completed.

The birds of Chichen Itza have been reported on by Chapman (1896) and Cole (1906). The only paper on the peninsula as a whole is Griscom's *The Ornithological Results of the Mason-Spinden Expedition* (1926) in which he discusses the distribution and relationships of the avifauna of northern Yucatan and the east coast. Campeche, however, has never been reported on separately, the only records being references in Ridgway's *Birds of North and Middle America* to specimens collected at Apazote and the city of Campeche by Nelson and Goldman.

In the state of Campeche, north of a line drawn northeast from Champoton, there is a continuation of the arid conditions of northern Yucatan, which are characterized by open scrub country and low forest, rarely reaching more than thirty-five or forty feet in height. South of this line, however, the forest increases in height and luxuriance, because of the greatly increased rainfall, and although no accurate figures are available, the climate is probably very like that of southern Quintana Roo and northern British Honduras. During our stay the temperature varied from a maximum of 98° (several days during late February) to a minimum of 50° (January 28). This cold period coincided with several *nortes* (cold winds and rains that sweep down from the gulf). Except during the periods of these storms, the temperature rarely drops below 65°.

Collecting conditions at Matamoros were only fair, for although there were many open trails, the presence of the large camp nearby, and the passage of many people over the trails, made the birds rather shy. Conditions at Pacaitun, however, were almost ideal, with many trails leading through the forest and to different *milpas* (Indian cornfields made by clearing and burning the forest), and with the river attracting many water birds which were not seen elsewhere. Although most of my hunting was naturally done in the forests, the *milpas* attracted many birds that might not otherwise have been seen, notably many sparrows, blackbirds, pigeons and woodpeckers, the last frequenting the large dead trees that are left standing in the fields. These trees were also the favorite look-outs of several forms of hawks.

The avifauna of southern Campeche is composed of two main elements: the arid Yucatan fauna from the north, and the northern fringe of the humid tropical fauna from the south. As might be expected in such an intermediate area as this, many species which are assigned either to endemic Yucatan subspecies, or to subspecies from Guatemala or southern Mexico, are in reality intergrades, which seem to favor one or the other form more closely. Allowing



FIG. 20. Localities from which specimens are listed.

for this intergradation, there still seems to be a preponderant Yucatan element. Of the thirty-five species collected, of which endemic subspecies have been named from northern Yucatan, twenty-five belong to the northern races and only ten to those of Guatemala or southern Mexico.

The Yucatan subspecies collected in Campeche were as follows:

<i>Ortalis vetula intermedia</i> (southern half of peninsula)	<i>Attila spadiceus gaumeri</i>
<i>Aramides cajanea albiventris</i>	<i>Pachyrhamphus major itzensis</i>
<i>Pteroglossus torquatus erythrozonus</i>	<i>Myiarchus tuberculifer platyrhynchus</i>
<i>Centurus aurifrons dubius</i>	<i>Xanthoura luxuosa maya</i>
<i>Centurus rubriventris rubriventris</i>	<i>Thryothorus rutilus canobrunneus</i>
<i>Dryobates scalaris parvus</i>	<i>Nannorchilis leucogaster brachyurus</i>
<i>Xiphorhynchus flavigaster yucatanensis</i>	<i>Mimus gilvus clarus</i>
<i>Sittasomus griseicapillus gracileus</i>	<i>Granatellus sallaei boucardi</i>
<i>Dendrocicla anabatina typhla</i>	<i>Icterus cucullatus igneus</i>
<i>Thamnophilus doliatus yucatanensis</i>	<i>Eucometis penicillata pallida</i>
<i>Formicarius analis pallidus</i>	<i>Salpator coerulescens yucatanensis</i>
	<i>Richmondia cardinalis yucatanica</i>

The following Guatemalan or Mexican subspecies were collected in Campeche:

<i>Crypturellus cinnamomeus intermedius</i>	<i>Psilorhinus mexicanus cyanogenys</i>
<i>Buteo magnirostris direptor</i>	<i>Cissolopha yucatanica rivularis</i>
<i>Momotus lessonii lessonii</i>	<i>Habia rubica rubicoides</i>
<i>Platypsaris aglaiae sumichrasti</i>	<i>Habia gutturalis littoralis</i>
<i>Tityra semifasciata personata</i>	<i>Salpator atriceps atriceps</i>

In order to complete the picture of the Yucatan element, there should also be included four species peculiar to the Yucatan peninsula which were found in Campeche, *Agriocharis ocellata*, *Amazilia yucatanensis*, *Myiarchus yucatanensis*, and *Piranga roseogularis roseogularis*.

However, this does not give by any means a complete picture, because twenty-one species were collected which are found only in the humid tropical zone and have never been collected in the northern part of the peninsula. These are listed below, the species marked with an asterisk apparently representing the first record from the peninsula.

* <i>Tinamus major percautus</i>	<i>Manacus candei</i>
* <i>Crypturellus soui meserythrus</i>	* <i>Schiffornis turdinus veraepacis</i>
* <i>Columba rufina pallidicrissa</i>	<i>Myiobius sulphureipygius sulphureipygius</i>
<i>Pionus senilis decoloratus</i>	<i>Henichorina leucosticta prosthaleuca</i>
* <i>Amazona autumnalis autumnalis</i>	<i>Hylophilus ochraceiceps ochraceiceps</i>
* <i>Phoebastria adolphi adolphi</i>	* <i>Chlorophanes spiza guatemalensis</i> (first record for Mexico)
<i>Trogon massena massena</i>	<i>Gymnostinops montezuma</i>
<i>Galbula melanogenia</i>	<i>Lanio aurantius aurantius</i>
<i>Dendrocolaptes certhia sancti-thomae</i>	<i>Caryothraustes poliogaster poliogaster</i>
* <i>Dysithamnus mentalis septentrionalis</i> (first record for Mexico)	* <i>Cyanococcyz cyanoides concreta</i>
* <i>Cercomacra tyrannina crepera</i>	

Naturally these species represent only a small percentage of the Caribbean rain forest fauna, but their presence demonstrates the much closer relationship of this fauna with that of Campeche, than with that of northern Yucatan. In this respect Campeche is intermediate between Yucatan and Peten, where the rain forest ele-

ment is much greater and the endemic forms of Yucatan reach their most southern outpost.

In the following list are species, either wide ranging tropical forms or migrants, which are here recorded for the first time from the peninsula:

Mycteria americana (Pacaitun)
Sarcorhamphus papa (Matamoros)
Rostrhamus sociabilis major (Pacaitun)
Spizaetus ornatus vicarius (Pacaitun)
Spizaetus tyrannus (Pacaitun)
Micrastur ruficollis guerilla (Pacaitun)
Heliornis fulica (Pacaitun)
Ara macao (Pacaitun)
Nyctibius griseus mexicanus (Pacaitun)
Notharchus hyperhynchus dysoni (Matamoros)
Lepidocolaptes souleyetti insignis (Pacaitun)
Myiarchus crinitus (Chichen Itza)
Rhamphocoenus rufiventris (Chichen Itza and Matamoros)
Hylocichla mustelina (Pacaitun)
Hylocichla ustulata ustulata (Matamoros)
Anthus spinoletta rubescens (Chichen Itza)
Icterus galbula (Matamoros)

The sequence of families in this report follows Wetmore (Smiths. Misc. Coll., 89, No. 13, 1934).

LIST OF SPECIES

Tinamus major percautus Van Tyne

Pacaitun, 1 male, 3 females, January 19–February 20.

These birds are identical in coloration with three specimens of the type series which I have had the privilege of examining. They were not uncommon at Pacaitun, but were very wild due to hunting.

Crypturellus soui meserythrus P. L. Selater

Pacaitun, 2 females, February 2 and 19.

Less common than either of the other tinamou.

Crypturellus cinnamomeus intermedius subsp. nov.

Type from Pacaitun, Campeche, Mexico. Alt. 200 feet. Field Museum of Natural History No. 120805. Adult female. Collected February 23, 1940, by Melvin Traylor, Jr. Orig. No. 819.

Diagnosis.—Above: resembles *C. c. soconuscensis* Brodkorb, and like it differs from all other races, in having a slatish cast to the back, tail coverts, primaries and secondaries; differs, however, from *soco-*

nuscensis by having the light barring paler and more sharply defined. Below: resembles *C. c. goldmani* Nelson, and like it differs from all other races, in having a sharp contrast between the rufous breast and the pale buffy white belly; differs, however, from *goldmani* in having more extensive and clearer white on the throat.

Description of type.—Forehead Blackish Plumbeus,¹ barred with Natal Brown; auricular region and hind neck Army Brown; mantle Fuscous, becoming lighter on upper back and faintly barred with Fuscous-Black; lower back and rump, Fuscous-Black, finely barred with Cinnamon-Buff; tail coverts Fuscous-Black barred with Pinkish Buff; middle and greater wing coverts and secondaries Fuscous-Black, strongly barred with Pinkish Buff; chin and throat white, shading through Snuff Brown to Sayal Brown on upper breast; lower breast Cinnamon-Buff; belly Cartridge Buff, with flanks and sides of belly heavily barred with Bone Brown. Wing 166 mm.; culmen 25.5.

Range.—Southern Campeche, and probably adjoining parts of Tabasco.

Remarks.—The new form is clearly intermediate in color between *goldmani* of northern Yucatan and *soconuscensis* of the Pacific coast of Chiapas, although it is separated from the latter by the highlands of Chiapas, where *vicinior*, a strikingly different form, is found. It is possible, however, that the range of *intermedius* and *soconuscensis* may prove to be contiguous somewhere in Tabasco or the Isthmus of Tehuantepec, from which practically no specimens are available. At present, the closest geographical race to *intermedius* on the mainland of Mexico is *sallaei*, of southern Vera Cruz, which differs in being much browner above, and in having a deep buff wash on the abdomen.

Due to the variation in size, measurements of individual birds are of little diagnostic value. On the whole, *sallaei* and *soconuscensis* seem to average considerably larger than either *goldmani* or *cinnamomeus*, and *intermedius* falls in between. As Conover noted in his description of *vicinior* (Proc. Biol. Soc. Wash., 46, p. 115, 1933) the females of the different races are much more constant than the males, and this certainly holds true in this new race. Whereas the barring on the back of the females is always clear and sharp, in the males it is often mottled or darker buff, with much less contrast. Also the contrast between the rufous breast and pale belly is not as sharp in two of the males, and these approach certain of the paler

¹ Capitalized names of colors are from Ridgway's *Color Standards and Nomenclature*, 1912.

males of *soconuscensis*. The latter race as a whole, however, is much deeper rufous below than any of the others.

At Pacaitun these tinamous were fairly common, and were found throughout the forest. During the dry season in late March and April, however, they are said to be found in large numbers along the banks of the river, after the swamps in the forest have dried up. This is also true of the deer, which are only found at Pacaitun during the dry season.

Specimens examined:

Crypturellus c. cinnamomeus.—7: SALVADOR (Olomega, San Miguel, 2 males, 1 female; Volcan San Miguel, San Miguel, 1 male; Rio San Miguel, San Miguel, 1 male; Volcan Conchagua, La Union, 1 male; Mount Cacaguatique, Morazan, 1 female).

Crypturellus c. soconuscensis.—11: MEXICO (Chiapas, Escuintla, 8 males, 3 females).

Crypturellus c. sallaei.—6: MEXICO (Jalapa, Vera Cruz, 2; Orizaba, Vera Cruz, 2; Precedio, Vera Cruz, 1 female; Pasa Neuva, Vera Cruz, 1 male).

Crypturellus c. intermedius.—9: MEXICO (Pacaitun, Campeche, 4 males, 5 females).

Crypturellus c. goldmani.—8: MEXICO (Chichen Itza, Yucatan, 1 male, 4 females; La Vega, Yucatan, 2 females; Puerto Morelos, Quintana Roo, 1 female).

Ardea herodias subsp.

Seen frequently along the river at Pacaitun.

Butorides virescens virescens Linnaeus

Pacaitun, 1 male, January 22.

Casmerodius albus egretta Gmelin

Common along the river at Pacaitun; one was seen at the sacred cenote at Chichen Itza.

Leucophoyx thula thula Molina

The Snowy Egret was not as common as the American, but was seen several times around Pacaitun.

Nyctanassa violacea violacea Linnaeus

Five were seen on a short trip down river from Pacaitun.

Mycteria americana Linnaeus

Fairly common. They were highly esteemed by the natives as food.

Phoenicopterus ruber Linnaeus

On January 11, a flock of ten of these were seen flying over the river near Pacaitun from our airplane. This is apparently the first record for the southwest coast of the peninsula, but Flamingos might be expected to wander this far after the breeding season. They were well known to the natives.

Sarcoramphus papa Linnaeus

One was seen soaring at Matamoros, and when we were flying down to Pacaitun we passed close beside one at an altitude of 1,000 feet.

Coragyps atratus atratus Bechstein

Ubiquitous.

Cathartes aura aura Linnaeus

Quite common, but seen singly rather than in flocks.

Elanoides forficatus subsp.

A flock of nine of these was seen at Pacaitun on February 25. They were flying over the river, slowly working their way upstream, and would frequently swoop down and drink on the wing, like swallows. Several others were seen on subsequent occasions.

Chondroheirax uncinatus uncinatus Temminck

Chichen Itza, 4 males 1 female, October 10–November 2; Matamoros, 1 male, December 21.

This was a surprisingly common hawk at Chichen Itza. Several others were seen, but were too wild to collect.

Rostrhamus sociabilis major Nelson and Goldman

Pacaitun, 1 female, February 6.

This is a very clearly marked race, since this bird is strikingly larger than any specimen of *plumbeus* in Field Museum.

Accipiter bicolor bicolor Vieillot

Chichen Itza, 1 male, November 10.

Accipiter striatus velox Wilson

Chichen, Itza, 1 female, November 3.

Buteo magnirostris conspectus Peters

Chichen Itza, 2 males, 2 females, October 17–November 3.

All these birds are in the immature plumage, with the breast heavily streaked with brown.

Buteo magnirostris direptor Peters and Griscom

Pacaitun, 4 males, 2 females, January 31–February 4.

Three of these birds match exactly a series of *direptor* from Guatemala, two show an approach to *griseocauda*, and one is almost as pale as *conspectus*. Such a mixture is to be expected in an area that is intermediate between the three races, and it is a matter of choice whether to say that all three forms are found here, or that these birds are intermediates showing the closest approach to *direptor*.

Buteo¹ nitida² micrus Miller and Griscom

Chichen Itza, 1 female, November 24; Matamoros, 1 male, January 2.

Both these birds, and two others from Yucatan in the Field Museum collection fall well within the size limits of the smaller southern race, and the single tail bar in the Matamoros bird bears out the size criterion.

Hypomorphnus urubitinga ridgwayi Gurney

Pacaitun, 1 male, 1 female, February 1.

Spizaetus ornatus vicarius Friedmann

Pacaitun, 1 female, January 21.

Andrews, while at Tizimin, in northern Yucatan, saw one of these birds that had just been shot by an Indian. Unfortunately he had no opportunity to preserve it, but its presence there gives a surprising extension of range for this species.

Spizaetus tyrannus Wied

Pacaitun, 1 female, January 19.

Circus cyaneus hudsonius Linnaeus

Chichen Itza, 1 female, November 1.

Herpetotheres cachinnans chapmani Bangs and Penard

Pacaitun, 1 male, 1 female, January 13 and February 10.

Not uncommon.

¹ Van Rossem (Bull. Mus. Comp. Zool., 77, p. 429, 1934) shows that if *Rupornis* is to be combined with *Buteo*, for the sake of consistency *Asturina* must be also.

² Peters, Check-list, 1, p. 240.

Micrastur semitorquatus naso Lesson

Pacaitun, 1 female, February 17.

This was one of a pair that were calling back and forth in the heavy forest near a *milpa*. The male flew before it could be collected.

Micrastur ruficollis guerilla Cassin

Pacaitun, 1 male (imm.), January 30.

This rare little hawk landed on a log in dense forest about twenty feet from where I was sitting.

Falco albigularis albigularis Daudin

Chichen Itza, 1 female, October 31; Pacaitun, 1 female, January 15.

Falco sparverius sparverius Linnaeus

Chichen Itza, 1 male, 3 females, October 8–November 16; Matamoros, 1 female, December 26; Pacaitun, 1 male, February 10.

Penelope purpurascens purpurascens Wagler

One was shot at Matamoros, and another at Pacaitun, but neither was preserved.

Ortalis vetula pallidiventris Ridgway

Chichen Itza, 4 males, 2 females, October 21–November 17.

Ortalis vetula intermedia Peters

Matamoros, 1 male, 3 females, December 18–January 1.

Three of these birds are identical in color with specimens from Quintana Roo and Peten. The fourth is as pale below as *pallidiventris* of Yucatan, but retains the isabelline tips on the tail feathers, as in *intermedia*.

Colinus nigrogularis nigrogularis Gould

Chichen Itza, 1 male, 3 chicks, November 4–7.

The chicks were very young, not more than two or three days old, and were unable to fly. All three were caught on November 4, but we were unable to keep them alive, and the last one died three days later.

Odontophorus guttatus guttatus Gould

Pacaitun, 1 male, 2 females, January 24–February 23.

Agriocharis ocellata Cuvier

Pacaitun, 1 female, January 17.

Twice flocks of fifteen or twenty birds were seen in a *milpa* by the edge of the forest. The species was also seen at Chichen Itza, but was very wild due to being hunted so much.

Aramides cajanea albiventris Lawrence

Pacaitun, 2 males, January 28 and February 24.

Porphyrula martinica Linnaeus

Matamoros, 1 male, December 26.

Heliornis fulica Boddaert

Pacaitun, 1 male, January 21.

Jacana spinosa gymnostoma Wagler

Matamoros, 1 female, December 31.

Charadrius vociferus vociferus Linnaeus

Chichen Itza, 1 female, October 24.

The Killdeer was also found at Pacaitun, where a flock of half a dozen was seen at the "airport" every day.

Erolia minutilla Vieillot

Pacaitun, 1 male, January 23.

Columba flavirostris flavirostris Wagler

Chichen Itza, 1 male, October 17; Pacaitun, 1 male, January 28.

Columba rufina pallidicrissa Chubb

Pacaitun, 1 male, 1 (?), January 28 and February 3.

This pigeon was usually found in flocks with *flavirostris*, but was always in the minority.

Zenaida asiatica asiatica Linnaeus

Chichen Itza, 2 females, November 13 and 22.

Columbigallina passerina pallescens Baird

Chichen Itza, 1 male, 1 female, October 26.

Columbigallina talpacoti rufipennis Bonaparte

Chichen Itza, 1 male, October 25; Matamoros, 1 male, December 20.

Claravis pretiosa Ferrari-Perez

Chichen Itza, 3 males, 2 females, November 7-21; Matamoros, 2 males, 2 females, December 23-24; Pacaitun, 1 female, February 9.

At Chichen Itza these birds could be found in the *milpas* by twos and threes when the corn was being gathered; in Matamoros and Pacaitun flocks of fifteen or twenty were not uncommon.

Leptotila verreauxi fulviventris Lawrence

Chichen Itza, 1 male, 1 female, October 14 and November 8; Matamoros, 1 female, December 23; Pacaitun, 1 male, February 10.

Oreopelia montana Linnaeus

Pacaitun, 2 females, February 17 and 25.

Ara macao Linnaeus

At Pacaitun several pairs were seen flying overhead at various times. They were usually along the river, but one pair was seen several miles back from the river in the forest.

Aratinga astec astec Souance

Chichen Itza, 2 males, November 1; Matamoros, 1 male, 1 female, December 22.

Pionus senilis decoloratus Griscom

Matamoros, 3 males, 1 female, December 21–January 4.

Although only a few specimens of typical *senilis* have been available for comparison, these birds are as dark as any I have seen from Guatemala and Costa Rica, and obviously belong to the southern form.

Amazona xantholora G. R. Gray

Chichen Itza, 4 males, 2 females, 1 imm.(?), October 24–November 11.

Many large flocks of parrots were seen at Chichen Itza, some of them numbering at least a hundred birds. In view of the apparent scarcity of *xantholora*, these must have been flocks mixed with *albifrons*, although as it happened, all the birds shot were *xantholora*. I was not able to distinguish the two forms in flight, the white foreheads on both appearing equally prominent. Although *xantholora* is known from British Honduras, it apparently does not reach southern Campeche.

Amazona albifrons nana W. de W. Miller

Matamoros, 2 males, December 24 and 26.

Amazona autumnalis autumnalis Linnaeus

Matamoros, 1 female, December 23; Pacaitun, 1 male, January 12.

These were seen frequently, but rarely more than one or two pairs together.

Coccyzus americanus americanus Linnaeus

Chichen Itza, 1 male, October 19.

Piaya cayana thermophila P. L. Selater

Chichen Itza, 2 males, 1 female (imm.), October 10–31; Matamoros, 2 males, 1 female, December 19–January 6; Pacaitun, 1 male, January 20.

Crotophaga sulcirostris sulcirostris Swanson

Chichen Itza, 1 male, October 8; Pacaitun, 1 female, February 11.

Dromococcyx phasianellus rufigularis Lawrence

Matamoros, 1 male, December 25.

Tyto alba pratincola Bonaparte

Chichen Itza, 1 female, October 15.

This bird was shot in the dry *cenote* near Chichen Itza, where it was apparently nesting in one of the small caves about thirty feet up in the wall. The ovary was much enlarged, one of the egg yolks being more than half an inch in diameter.

Otus guatemalae thompsoni Cole

Chichen Itza, 1 female, October 23; Pacaitun, 1 female, February 26.

Both these birds were flushed off the ground in daylight, and lit about four feet up in small trees. The Pacaitun bird shows only a very slight intergradation with *guatemalae*.

Glaucidium brasilianum ridgwayi Sharpe

Chichen Itza, 2 females, October 25 and 29; Matamoros, 1 male, 1 female, December 22 and 31; Pacaitun, 1 female, January 29.

Nyctibius griseus mexicanus Nelson

Pacaitun, 1 male, January 17.

Nyctidromus albicollis yucatanensis Nelson

Chichen Itza, 1 male, 2 females, October 8–November 2; Matamoros, 2 males, December 22.

Phoebastria immutabilis immutabilis Gould

Pacaitun, 1 female, 1 (?), February 4 and 8.

This little hermit was not so uncommon as only two specimens would indicate, but its minute size made it very difficult to collect in a fit state for preservation.

Pampa pampa pampa Lesson

Chichen Itza, 2 males, 1 female, October 22–November 10; Matamoros, 1 male, 1 female, December 18 and 28; Pacaitun, 2 males, January 29 and February 4.

Although Campeche is included in the range of *curvipennis*, my birds from there are as dark below, and have as short bills, as typical *pampa*, and must be referred to that form.

Agyrtria candida candida Bourcier and Mulsant

Chichen Itza, 2 males, 1 female, 1 (?), October 9–November 16; Matamoros, 2 males, December 29 and January 4; Pacaitun, 1 male, 1 female, January 15 and February 20.

This form, and *Chlorostilbon c. canivetii* were by far the most common hummingbirds, both in Yucatan and Campeche.

Amazilis tzacatl tzacatl De La Llave

Pacaitun, 1 male, 2 females, 1 (?), January 13–22.

Amazilis yucatanensis yucatanensis Cabot

Chichen Itza, 2 males, 1 female, October 18–November 12; Matamoros, 3 males, December 26–January 8; Pacaitun, 1 male, January 31.

Amazilis rutila rutila Delattre

Chichen Itza, 2 females, 1 (?), October 22–November 19.

Chlorostilbon canivetii canivetii Lesson

Chichen Itza, 3 males, 2 females, October 8–24; Matamoros, 1 male, 1 female, December 20 and 26; Pacaitun, 1 male, January 12.

Anthracothonax prevostii prevostii Lesson

Pacaitun, 2 males, 1 female, January 13–30.

Trogon collaris puella Gould

Matamoros, 1 male, 1 female, January 1.

This pair were the only ones seen of this species.

Trogon melanocephala melanocephala Gould

Chichen Itza, 4 males, 1 female, October 10–November 14; Matamoros, 2 males, 2 females, December 19–January 9; Pacaitun, 1 male, 2 females, January 29–February 9.

The most common trogon; one or more seen almost every day in Campeche.

Trogon caligatus sallaei Bonaparte

Chichen Itza, 1 male, 1 female, October 29 and November 3; Matamoros, 2 males, 2 females, December 27–January 6.

Trogon massena massena Gould

Pacaitun, 1 male, January 24.

Megaceryle torquata torquata Linnaeus

Pacaitun, 2 males, January 24 and February 3.

Frequently seen along the river, usually in pairs.

Chloroceryle americana isthmica Goldman

Pacaitun, 1 male, 1 female, January 15 and 24.

These birds are intermediates, but seem closer to *isthmica* than to *septentrionalis*.

Chloroceryle aenea stictoptera Ridgway

Pacaitun, 1 male, 1 female, January 22 and February 7.

This species was not uncommon, but the birds were difficult to collect when flying in and out among the mangrove roots.

Eumomota superciliosa superciliosa Sandbach

Chichen Itza, 2 males, 1 female, October 23–November 1.

Momotus lessonii lessonii Lesson

Matamoros, 2 males, 1 female, December 23–January 2; Pacaitun, 1 male, January 16.

These birds are intermediates between *lessonii* and *exiguus*, of northern Yucatan. Although very little can be determined on the basis of color, because of the wide range of individual variation, in size they average closer to *lessonii*.

Momotus lessonii exiguus Ridgway

Chichen Itza, 2 males, 2 females, October 14–November 15.

Galbula malanogenia Sclater

Pacaitun, 1 female, February 5.

The only one seen.

Notharchus hyperhynchus dysoni Sclater

Matamoros, 1 female, January 3.

One other was seen, in the top of a very tall, dead tree.

Ramphastos sulfuratus sulfuratus Lesson

Chichen Itza, 3 males, 3 females, October 11–17; Matamoros, 2 males, 1 female, December 20–January 8; Pacaitun, 1 female, January 21.

These birds, according to the natives, are very rare at Chichen Itza. The flock from which my specimens were collected numbered between twenty and twenty-five birds, and it stayed in the vicinity for at least two weeks. It was apparently composed almost entirely of young birds, since all the specimens collected were birds of the year.

Pteroglossus torquatus erythrozonus Ridgway

Matamoros, 2 males, 2 females, December 19–January 2.

These birds show no approach whatsoever to typical *torquatus*.

Centurus aurifrons dubius Cabot

Chichen Itza, 1 male, 1 female, October 9 and 14; Matamoros, 2 females, December 20 and January 8; Pacaitun, 1 male, January 19.

The most common woodpecker both in Yucatan and Campeche.

Centurus rubriventris rubriventris Swainson

Pacaitun, 1 male, 1 female, January 26 and February 16.

Much less common than *C. a. dubius*. It was seen at Chichen Itza, though not collected.

Piculus rubiginosus yucatanensis Cabot

Chichen Itza, 1 male, 1 female, October 27 and November 1; Matamoros, 4 males, 1 female, December 21–January 9; Pacaitun, 1 male, January 26.

Much less common at Chichen Itza than in Campeche.

Celeus castaneus Wagler

Matamoros, 2 females, January 6 and 9; Pacaitun, 1 female, January 17.

Ceophloeus lineatus similis Lesson

Matamoros, 1 male, December 22; Pacaitun, 1 female, Jan. 14.

Phloeoceastes guatemalensis guatemalensis Hartlaub

Chichen Itza, 1 male, October 15; Pacaitun, 1 male, February 17.

Veniliornis oleaginus sanguinolentus Sclater

Matamoros, 1 male, December 31; Pacaitun, 1 male, 2 females, January 24–February 20.

***Dryobates scalaris parvus* Cabot**

Chichen Itza, 2 males, 2 females, October 12-30; Pacaitun, 1 male, 1 female, January 23 and February 14.

It was rather surprising to find this bird in southern Campeche, where the forest is much heavier than in the northern third of the peninsula. All that were seen were in *milpas* or other clearings.

***Dendrocolaptes certhia sancti-thomae* Lafresnaye**

Pacaitun, 1 male, 1 female, January 19 and 24.

***Xiphorhynchus flavigaster yucatanensis* Ridgway**

Chichen Itza, 1 male, 3 females, October 6-November 19; Matamoros, 3 females, December 21-January 8; Pacaitun, 1 female, 1(?), February 11 and 28.

Peters (1913, p. 374) says that the majority of the birds of this species that he collected in southern Quintana Roo were closer to *flavigaster*, but my series from Campeche is indistinguishable from *yucatanensis* of northern Yucatan.

***Lepidocolaptes souleyetii insignis* Nelson**

Pacaitun, 1 female, January 26.

***Sittasomus griseicapillus gracileus* Bangs and Peters**

Chichen Itza, 2 males, 1 female, October 9-21; Matamoros, 1 male, December 30; Pacaitun, 2 males, January 13 and 25.

This form and *X. f. yucatanensis* were the most common wood-hewers.

***Dendrocincla homochroa homochroa* Sclater**

Chichen Itza, 1 male, October 26; Pacaitun, 1 male, 2 females, January 16-March 1.

***Dendrocincla anabatina typhla* Oberholser**

Pacaitun, 1 male, 2 females, February 4-20.

These birds are intermediate in coloration, but seem to be closer to *typhla*.

***Synallaxis erythrothorax erythrothorax* Sclater**

Pacaitun, 2 males, 1 female, January 27-February 14.

***Xenops minutus mexicanus* Sclater**

Pacaitun, 3 males, 2 females, February 1-26.

***Thamnophilus doliatus yucatanensis* Ridgway**

Chichen Itza, 2 males, 1 female, November 7-16; Matamoros, 1

male, December 27; Pacaitun, 3 males, 4 females, January 26–February 24.

Here again we are dealing with a group of birds which are intermediates. The three males from Pacaitun are darker than those from Chichen Itza, and one of them, if it stood alone, could probably be called *mexicanus*. However, the Campeche series as a whole is closer to *yucatanensis*, and it seems preferable to place them all under that name. This antbird was fairly common, being found mostly in scrubby undergrowth.

Dysithamnus mentalis septentrionalis Ridgway

Pacaitun, 2 males, February 15 and 23.

As far as I can learn, this is the first Mexican record for this antbird.

Cercomacra tyrannina crepera Bangs

Pacaitun, 3 males, 1 female, February 19–22.

This bird had a rather odd distribution at Pacaitun. It was fairly common for a short stretch of trail east of the camp, but was seen nowhere else in the forest. There were no apparent differences in vegetation or topography that would account for this.

Formicarius analis pallidus Lawrence

Matamoros, 1 male, 2 females, December 24–January 6; Pacaitun, 2 males, 1 female, February 1–9.

Although I have not had an opportunity to compare these birds directly with specimens of *pallidus*, they differ markedly from *intermedius* and *moniliger* by having practically no rufous on the back, and by being paler below. Since these are the diagnostic characters of *pallidus*, I feel no hesitation in assigning them to that form. These birds were fairly common at Matamoros and Pacaitun; like the tinamous they preferred to escape by running, flying only when hard pressed.

Attila spadiceus gaumeri Salvin and Godman

Chichen Itza, 1 male, November 24; Matamoros, 3 males, 2 females, December 19–January 9; Pacaitun, 1 male, 1 female, January 15 and February 14.

These birds, with the exception of the one from Chichen Itza, are intermediates between *gaumeri* and *flammulatus*, but seem to be closer to the former. They are slightly smaller than *flammulatus*,

and are less rufous above, particularly on rump and tail. Only two have any yellowish wash on the breast.

***Pachyramphus major itzensis* Nelson**

Chichen Itza, 1 male, November 15; Pacaitun, 1 female, February 14.

***Platypsaris aglaiae sumichrasti* Nelson**

Matamoros, 1 male, January 6; Pacaitun, 1 female, January 31.

The Pacaitun bird is still immature and has the pileum clearly defined, but the Matamoros bird is fully adult and has the pileum and upper back jet black, and the pink on the breast restricted.

***Platypsaris aglaiae yucatanensis* Ridgway**

Chichen Itza, 2 males, 3 females, November 2–21.

***Tityra semifasciata personata* Jardine and Selby**

Matamoros, 3 males, 2 females, December 29–January 8; Pacaitun, 1 male, 1 female, January 12.

***Tityra semifasciata deses* Bangs**

Chichen Itza, 1 male, 2 females, October 9–23.

None of these specimens is actually separable from a large series of *personata*, although they are topotypes of *deses*. However, there is a male in Field Museum from "Yucatan," which shows the described characters of paler back and nearly white under parts very clearly. It seems that this is a rather weak race in which the characters are found in only a limited number of specimens.

***Erator albitorques fraserii* Kaup**

Chichen Itza, 1 male, 1 female, November 16 and 21; Matamoros, 1 male, December 27.

***Pipra mentalis mentalis* Selater**

Matamoros, 3 males, December 27–January 3; Pacaitun, 2 males, 2 females, January 15–27.

***Manacus candei* Parzudalri**

Pacaitun, 1 male, February 14.

***Schiffornis turdinus verae-pacis* Selater and Salvin**

Pacaitun, 4 males, January 15–February 9.

Two of these birds were in breeding condition. This species was surprisingly common, considering that it has been recorded only once before from Mexico, at Playa Vicente, Vera Cruz.

***Pyrocephalus rubinus blatteus* Bangs**

Progreso, 1 male, 1 female, March 19.

This pair was collected just outside of Progreso on one of our many attempts to settle our customs difficulties. Vermilion flycatchers, almost certainly belonging to this subspecies, were seen several times at Pacaitun, but I was unable to collect any.

***Tyrannus melancholicus chloronotus* Berlepsch**

Chichen Itza, 2 males, 1 female, October 12-30; Matamoros, 1 female, January 1.

One of the male birds from Chichen Itza had the mandible deformed, so that it hooked over like a cross-bill. Although it was in otherwise healthy condition, it was unable to pick off lice, and consequently was infested with them.

***Megarhynchus pitangua mexicanus* Lafresnaye**

Chichen Itza, 1 male, 1 female, October 11 and 13; Matamoros, 1 male, 2 females, December 19-January 4; Pacaitun, 1 female, February 3.

***Miozetetes similis superciliosus* Bonaparte**

Chichen Itza, 1 female, October 14; Matamoros, 2 males, December 26 and January 8.

***Pitangus sulfuratus guatemalensis* Lafresnaye**

Matamoros, 2 males, January 2 and 5; Pacaitun, 1 male, February 10.

These birds are definitely representatives of the smaller, darker, southern form. One of the Matamoros specimens was feeding in the midst of some army ants.

***Myiarchus crinitus* Linnaeus**

Chichen Itza, 2 males, November 7 and 11.

This is the first recording of the Crested Flycatcher from Yucatan.

***Myiarchus tyrannulus nelsoni* Ridgway**

Chichen Itza, 3 females, October 28-November 22.

These are slightly darker above than the series of skins in Field Museum, but since all of the latter are thirty years old, this is undoubtedly due to fading.

Myiarchus yucatanensis Lawrence

Chichen Itza, 1 male, October 28; Matamoros, 1 male, December 18; Pacaitun, 2 males, January 23 and February 14.

This is a considerable extension of range for this species, which previously was known only from the northern third of the peninsula.

Myiarchus tuberculifer platyrhynchus Ridgway

Chichen Itza, 2 males, 4 females, October 7–November 14; Pacaitun, 4 males, 1 female, January 23–February 14.

The rapid plumage changes effected by wear are well illustrated by these two series, for contrary to the usual situation, the fall birds from Chichen Itza are darker yellow below than the winter birds from Pacaitun.

Myiochanes cinereus brachytarsus Selater

Pacaitun, 1 male, February 3.

Empidonax minimus Baird

Chichen Itza, 2 males, 1 female, October 6–7; Matamoros, 1 male, December 21.

Myiobius sulphureipygius sulphureipygius Selater

Pacaitun, 1 male, 2 females, February 11–26.

Onychorhynchus mexicanus mexicanus Selater

Chichen Itza, 1 male, November 9; Matamoros, 1 female, December 28; Pacaitun, 1 female, February 27.

The female from Pacaitun was only wing-tipped, and when finally captured gave an excellent demonstration of the crest display, which is so well described in the *Biologia Centrali-Americana*. The crest was erected into a wide semi-circle, and the head was rotated slowly back and forth, giving a very weird effect.

Platyrinchus cancrominus Selater and Salvin

Pacaitun, 1 male, February 15.

Tolmomyias sulphurescens cinereiceps Selater

Pacaitun, 1 female, February 24.

This specimen is rather curious in having several white feathers in the crown. There is no other sign of albinism.

Rhynchocyclus brevirostris brevirostris Cabanis

Pacaitun, 1 male, 1 female, January 26 and February 17.

Todirostrum cinereum finitimum Bangs

Pacaitun, 1 female, January 24.

Oncostoma cinereigulare cinereigulare Sclater

Pacaitun, 1 male, 2 females, February 12-27.

Elainea flavogaster subpagana Sclater and Salvin

Pacaitun, 1 male, February 3.

This specimen is very different from the general run of *E. f. subpagana*. It is a very pale bird; the belly has only a light yellow wash, and the throat is a very pale gray, almost white. Above there is only a slight olive tinge, and the wing bars and edgings on the secondaries are very light grayish brown, without any trace of olive or buff. The wing and tail measurements are well within the range of *subpagana*, although the exposed culmen is 12+ mm., about the maximum for the group. I have not been able to match this with any specimens of *subpagana* that I have seen, but for lack of series, it must obviously be referred to that form.

Pipromorpha oleaginea assimilis Sclater

Chichen Itza, 1 male, November 13; Matamoros, 2 males, 1 female, December 20-24; Pacaitun, 1 female, February 21.

This is the first record of this species from northern Yucatan, although Griscom records it from the east coast (1926, p. 14).

Stelgidopteryx ruficollis ridgwayi Nelson

Chichen Itza, 2 males, 3 females, October 9-November 3.

This is a very well-marked subspecies. At least a hundred or more of these birds roosted under the porch roof at the hacienda, and one was collected in a large cave in a *cenote*.

Iridoprocne albilinea Lawrence

Pacaitun, 1 male, January 15.

This swallow was very common along the river.

Psilorhinus mexicanus cyanogenys Sharpe

Matamoros, 1 female, December 19; Pacaitun, 1 male, 1 female, January 24 and 27.

This bird is as much of a pest as our own Blue Jay, following the hunter for long distances and scaring everything away with its screaming.

Xanthoura luxuosa maya van Rossem

Chichen Itza, 1 male, 1 female, October 17 and 23; Matamoros, 3 females, December 24–January 1.

The Matamoros specimens show no approach in size to *centralis* of Guatemala and northern Honduras.

Cissolopha yucatanica yucatanica Dubois

Chichen Itza, 1 male, 1 female, October 21 and November 24.

Cissolopha yucatanica rivularis Brodkorb

Matamoros, 1 male, 1 female, December 24.

Only the male is fully adult and with the black bill, but its measurements are slightly larger than the maximum of a series of eight birds from northern Yucatan. There is only a slight color difference in the male, and none in the female.

Thryothorus albinucha albinucha Cabot

Chichen Itza, 1 male, November 20.

Thryothorus rutilus canobrunneus Ridgway

Chichen Itza, 2 males, 1 female, October 12–November 12; Matamoros, 2 males, December 21 and January 8; Pacaitun, 1 male, 1 female, January 25 and February 2.

The birds from Campeche begin to show an approach to *umbrinus* in the intensity of spotting on the breast.

Henichorhina leucosticta prosteleuca Sclater

Pacaitun, 1 male, February 1.

Nannorchilus leucogaster brachyurus Lawrence

Chichen Itza, 2 males, 3 females, October 6–26; Matamoros, 2 males, December 31 and January 3; Pacaitun, 2 males, 1 female, January 19–February 13.

Melanoptila glabrirostris Sclater

Chichen Itza, 1 (?), October 18.

This is the first record of this form from Chichen Itza, as it is confined to the coast for the most part. However, it has been reported from Ixtinta in Peten by Van Tyne (1935, p. 36) so it may range farther inland than has been expected.

Dumetella carolinensis Linnaeus

Chichen Itza, 2 males, October 17 and 18; Matamoros, 1 male, January 9.

One of the commonest winter visitors.

Mimus gilvus clarus van Rossem

Pacaitun, 1 male, 2 females, January 12–February 3.

Turdus grayi tamaulipensis Nelson

Chichen Itza, 1 male, October 11; Pacaitun, 1 male, 1 female, January 16 and 25.

Hylocichla mustelina Gmelin

Pacaitun, 1 male, January 25.

A common winter visitant.

Hylocichla ustulata ustulata Nuttall

Matamoros, 1 male, 1 female, December 20 and 22.

Polioptila caerulea deppei van Rossem

Chichen Itza, 2 males, October 7 and 24; Pacaitun, 1 male, February 12.

Ramphocaenus rufiventris rufiventris Bonaparte

Chichen Itza, 2 males, November 9–20; Pacaitun, 1 male, 1 (?), January 18 and 21.

It is rather surprising that there are no records of this bird from northern Yucatan, a region that has been thoroughly collected, since I found it not uncommon at Chichen Itza.

Anthus spinoletta rubescens Tunstall

Chichen Itza, 1(?), November 1.

This was a rather unexpected migrant. It was collected by Mr. Andrews, along the road from Chichen Itza to Piste.

Vireo griseus griseus Boddaert

Chichen Itza, 2 males, 1 female, October 10–November 5; Matamoros, 1 male, December 20; Pacaitun, 1 female, January 20.

Vireo flavifrons Vieillot

Chichen Itza, 1 female, October 6.

Hylophilus ochraceiceps ochraceiceps Sclater

Pacaitun, 2 males, February 4 and 11.

Hylophilus decurtatus decurtatus Bonaparte

Pacaitun, 1 male, February 13.

Cyclarhis gujanensis yucatanensis Ridgway

Chichen Itza, 5 males, October 19–November 12.

This species seems to prefer scrubby brush.

Chlorophanes spiza guatemalensis Sclater

Pacaitun, 1 female, January 31.

This is the first record of this species from Mexico. Only one was seen.

Mniotilta varia Linnaeus

Chichen Itza, 1 male, 1 female (?), October 12–November 9;
Pacaitun, 1 female, January 27.

Protonotaria citrea Boddaert

Chichen Itza, 2 males, October 7 and 18.

Limnothlypis swainsonii Audubon

Pacaitun, 1 male, January 15.

Compsothlypis americana pusilla Wilson

Pacaitun, 1 male, January 30.

Dendroica aestiva rubiginosa Pallas

Pacaitun, 1 male, February 19.

Dendroica magnolia Wilson

Chichen Itza, 1 male, October 7.

Dendroica pensylvanica Linnaeus

Chichen Itza, 2 males, 1 female, October 6–9.

This warbler has been recorded only once before from Yucatan.

Seiurus aurocapillus aurocapillus Linnaeus

Chichen Itza, 1 male, 1 female, October 24 and November 13;
Matamoros, 1 male, December 19.

A very common winter bird.

Oporornis formosus Wilson

Pacaitun, 1 male, January 19.

Geothlypis trichas brachidactyla Swainson

Chichen Itza, 1 female, 1(?), October 8 and 19.

Chamaethlypis poliocephala palpebralis Ridgway

Chichen Itza, 1 male, October 19; Pacaitun, 1 female, February 15.

Icteria virens virens Linnaeus

Chichen Itza, 2 males, 1 female, October 18–November 17;
Matamoros, 1 female, December 20.

Granatellus sallaei boucardi Ridgway

Chichen Itza, 2 males (ad.), 2 males (imm.), October 18–Nov. 20; Matamoros, 1 male, 2 females, December 21–January 3.

I was surprised to find this species not uncommon. It was always found near the ground in heavy brush, and consequently was not very easy to collect. The young males are very like the females, having only slightly more slate blue on the back.

Wilsonia citrina Boddaert

Chichen Itza, 1 male, November 12; Matamoros, 1 male, December 21; Pacaitun, 1 female, January 22.

Setophaga ruticilla Linnaeus

Chichen Itza, 2 males, October 25 and 29; Matamoros, 1 female, December 22.

Gymnostinops montezuma Lesson

Pacaitun, 1 male, February 6.

This *Oropendola* was uncommon, only one other being seen.

Amblycercus holosericeus holosericeus Lichtenstein

Chichen Itza, 1 female, 1(?), October 19 and November 20; Matamoros, 1 male, 1 female, December 25 and 28.

These birds are as much trouble to skin as the woodpeckers, due to the very heavy musculature on the head.

Tangavius aeneus aeneus Wagler

Pacaitun, 2 females, January 18 and February 8.

Cassidix mexicanus mexicanus Gmelin

Chichen Itza, 2 females, November 2; Pacaitun, 1 male, January 21.

Dives dives dives Lichtenstein

Chichen Itza, 1 female, October 30; Pacaitun, 1 male, 1 female, January 18 and February 12.

Icterus galbula Linnaeus

Matamoros, 1 female, December 20.

Icterus spurius Linnaeus

Pacaitun, 1 male, 1 female, January 31.

Several flocks of the Orchard Oriole were seen.

Icterus prothemelas prothemelas Strickland

Chichen Itza, 1 male, 2 females, October 27–November 10; Matamoros, 3 males, 2 females, December 18–January 4; Pacaitun, 2 males, 1 female, January 12–February 14.

Only three birds out of this series are adult, the rest showing various degrees of immaturity.

Icterus mesomelas mesomelas Wagler

Matamoros, 1 female, December 18; Pacaitun, 1 female, February 17.

Icterus chrysater chrysater Lesson

Pacaitun, 1 female, January 21.

Icterus auratus Bonaparte

Chichen Itza, 1 male, 1 female, October 27 and 28.

This species was not found in southern Campeche, and it is apparently confined to the northern third of the peninsula.

Icterus gularis yucatanensis Berlepsche

Chichen Itza, 2 males, 4 females, October 7–November 4; Matamoros, 1 male, 1 female, December 29 and January 6.

Icterus cucullatus igneus Ridgway

Pacaitun, 1 male, February 15.

Although I have not seen any specimens of *masoni*, which is found on the east coast of the peninsula and in northern British Honduras, this specimen shows no approach to the characters ascribed to that form, and belongs to the race of northern Yucatan.

Agelaius phoeniceus matudae Brodkorb

Pacaitun, 3 males, 1 female, January 12–February 15.

There is no question that these birds are considerably smaller than the surrounding race, *nelsoni*, of Vera Cruz and northern Yucatan.

Tanagra affinis Lesson

Chichen Itza, 1 male, October 29.

Tanagra lauta lauta Bangs and Penard

Chichen Itza, 2 males, October 12 and 26; Pacaitun, 2 males, January 23 and February 11.

Thraupis abbas Lichtenstein

Pacaitun, 2 males, January 21 and February 14.

Piranga rubra rubra Linnaeus

Chichen Itza, 1 male, 2 females, October 16–November 17; Matamoros, 1 male, January 8; Pacaitun, 1 male, 2 females, January 16–February 8.

A very common winter visitant.

Piranga roseo-gularis roseo-gularis Cabot

Chichen Itza, 2 males (imm.), 2 females, October 10–November 4; Pacaitun, 3 males, 2 females, January 16–February 8.

This species was rather more common than expected. Three of the birds from Pacaitun were shot the same day out of some kind of fruit tree. As a rule, however, they seem to be solitary in habits, since that was the only occasion on which more than one was seen.

Habia rubica rubicoides Lafresnaye

Matamoros, 3 males, 1 female, December 22–January 4; Pacaitun, 2 males, 1 female, January 27–28.

Habia gutturalis littoralis Nelson

Matamoros, 3 males, 2 females, December 18–January 2; Pacaitun, 1 male, January 20.

These birds are intermediate in size between *littoralis* and *peninsularis*, but in color they match *littoralis* quite closely.

Habia gutturalis peninsularis Ridgway

Chichen Itza, 3 males (ad.), 2 males (imm.), 2 females, October 16–November 11.

This was the only ant tanager at Chichen Itza. *H. r. nelsoni* occurs there, but none were seen.

Lanio aurantius aurantius Lafresnaye

Pacaitun, 4 females, January 17–February 23.

No males were seen.

Eucometis penicillata pallida Berlepsch

Pacaitun, 2 males, 2 females, January 24–February 2.

Saltator atriceps atriceps Lesson

Matamoros, 3 males, 1 female, December 18–January 3; Pacaitun, 2 males, February 7 and 10.

Saltator atriceps raptor Cabot

Chichen Itza, 5 males, October 7–November 7.

This series of birds is clearly distinguishable from typical *atriceps* by the paler gray of the under parts; the race *raptor* seems to be a valid one. Griscom, however, fails to recognize it, and possibly it is a weak race in which the diagnostic characters are absent in a certain number of birds.

***Saltator coerulescens yucatanensis* Berlepsch**

Pacaitun, 3 males, 3 females, January 13–February 15.

This species was very common at Pacaitun, but was not seen at Matamoros, only fifteen miles away.

***Caryothraustes polioaster polioaster* DuBus**

Pacaitun, 3 males, January 17.

These three birds were collected out of a large flock that was traveling along well up in the trees. Another large flock was seen at a later date, but none were collected from it.

***Richmondia cardinalis yucatanica* Ridgway**

Merida, 1 male, March 19; Chichen Itza, 4 males, 3 females, October 14–28; Matamoros, 2 males, 3 females, December 18–26; Pacaitun, 2 males, 2 females, January 15–February 5.

In this series from the peninsula, there is no variation at all between birds from the north and from the extreme south, and *yucatanica* apparently ranges over the whole peninsula, with the exception of extreme southeastern Quintana Roo, where *flammigera* is found.

***Hedymeles ludovicianus* Linnaeus**

Chichen Itza, 2 males, 1 (?), November 7–18; Pacaitun, 1 male, January 22.

***Guiraca caerulea caerulea* Linnaeus**

Chichen Itza, 1 male, 1 female, 1 (?), October 28–November 19.

The Blue Grosbeak was also common at Pacaitun.

***Cyanocompsa parellina parellina* Bonaparte**

Chichen Itza, 2 males, 1 female, November 8–22; Matamoros, 3 males, 3 females, December 23–January 8; Pacaitun, 2 males, January 12 and 18.

The two Pacaitun males show an approach to *dearborni* in having somewhat brighter blue below, but they are closer to typical *parellina*.

Cyanocompsa cyanoides concreta DuBus

Matamoros, 1 male, January 4; Pacaitun, 2 males, 4 females, January 13–February 28.

Passerina cyanea Linnaeus

Chichen Itza, 2 males, October 24 and November 9; Pacaitun, 1 (?), February 11.

Passerina ciris ciris Linnaeus

Chichen Itza, 4 males, 1 female, October 21–November 15; Matamoros, 1 male, December 21.

Both the Indigo and Painted Buntings were very common winter visitants at all collecting sites.

Sporophila torqueola morelleti Bonaparte

Matamoros, 2 males, December 19 and 24; Pacaitun, 1 male, January 18.

Volatinia jacarina splendens Vieillot

Chichen Itza, 1 male, 1 female, October 16 and 18; Pacaitun, 1 male, January 16.

Spinus psaltria jouyi Ridgway

Chichen Itza, 1 male, November 15.

Arremonops rufivirgatus verticalis Ridgway

Chichen Itza, 1 male, 1 female, November 2.

Arremonops conirostris chloronotus Salvin

Chichen Itza, 2 females, November 1 and 12; Pacaitun, 3 males, January 13–26.

This was the more common *Arremonops* at Chichen Itza, and was the only one seen in southern Campeche.

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