

## NORTH AMERICAN MIGRANTS IN THE STATE OF VERACRUZ, MEXICO: A SUMMARY

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PRIOR to the appearance of a comprehensive report, now in preparation, on the more than 700 forms of birds known from Veracruz, it seems desirable to summarize the present status there of migrants from the north. It is hoped that this summary may prove useful to students of North American and Mexican birds, and at the same time by revealing gaps in our knowledge of migratory birds in Veracruz, that it may stimulate further work in this interesting, readily accessible, region.

*Scope.*—Essentially, this paper is limited to birds of the A.O.U. Check-List (4th ed., 1931, and nineteenth through twenty-eighth supplements) which have been found in Veracruz but are not known to breed there. All but two, Wilson's Petrel (*Oceanites oceanicus*) and the Black-headed Gull (*Larus ridibundus*), nest in North America.

For completeness, I have included the following migratory forms whose breeding status in Veracruz remains to be determined: Eastern Least Bittern (*Ixobrychus exilis exilis*), Florida Common Gallinule (*Gallinula chloropus cachinnans*), Wilson's Thick-billed Plover (*Charadrius wilsonia wilsonia*), Northern Black Skimmer (*Rynchops nigra nigra*), and American Barn Swallow (*Hirundo rustica erythrogaster*).

Certain other species, for example the Rough-winged Swallow (*Stelgidopteryx ruficollis*), have one or more migratory northern races and another form nesting in Veracruz. In such cases, I have listed the northern race(s) when represented by critically determined Veracruz specimens.

Among the migratory or partially migratory North American forms omitted from this summary for the reason that their breeding in Veracruz is established or quite probable are the Pied-billed Grebe (*Podilymbus podiceps* subspecies?), Eastern Green Heron (*Butorides virescens virescens*), Black-crowned Night Heron (*Nycticorax nycticorax hoactli*), Yellow-crowned Night Heron (*Nyctanassa violacea violacea*), Masked Duck (*Oxyura dominica*), White-tailed Hawk (*Buteo albicaudatus hyospodius*), American Coot (*Fulica americana americana*), Black-necked Stilt (*Himantopus mexicanus*), Western Burrowing Owl (*Speotyto cunicularia hypugaea*), and Eastern Varied Bunting (*Passerina versicolor versicolor*).

I have tried to indicate each bird's relative abundance in Veracruz, and, where sufficient data exist, its altitudinal preference and season(s)

of occurrence. Unfortunately, for more than one-half of the 243 migrants treated, no representative fall dates are available to show when these birds arrive in Veracruz, southbound, and, in the case of most of the transients, to show when they leave the state for their Central or South American wintering grounds. Spring migration dates are much more plentiful, though far from adequate. The omission of dates, whether for fall or spring or both, indicates that representative Veracruz migration dates for these seasons are lacking, so far as I am aware.

In assembling the data for this report it is hoped that only a small number of records published before 1953 have been overlooked. Obviously, however, specimens in collections which I have not had the opportunity of examining, and field observations not known to me would doubtless alter the status of a number of these birds and add others to the list.

*Sources of Data.*—Principally four, as follows:

1. Contact with many people who have kindly shared their knowledge with me.

2. Field trips to central and southern Veracruz in 1937 (July 27 to September 1) and 1939 (February 27 to June 27), and to northern and central Veracruz in 1952 (June 26 to August 9). All sight records, unless otherwise stated, were made by the writer. For many of the less common migrants, when readily identifiable in life, I have listed all of my observations; for the commoner migrants I have as a rule incorporated my field notes in the summary without actually referring to them. Similarly, I have mentioned specimens personally taken only when they represent unusual occurrences or dates.

3. Study of pertinent literature.

4. Studies, conducted chiefly in 1938 and 1950, of most Veracruz birdskins now in the United States, with the important exception of the Robert T. Moore Collection.

In the museums listed below I have been privileged to examine all or nearly all bird specimens from Veracruz (also many from adjacent areas), including mounted birds as well as study collections. To indicate the location of specimens *personally examined*, I have employed the alphabetical symbols originated by Friedmann, Griscom, and Moore (1950: 7). Since I have not visited the Dickey Collection, Moore Collection, or British Museum, letters B, K, and M, respectively, are omitted, as is letter I, now that the U. S. Fish and Wildlife Service Collection is being merged with that of the U. S. National Museum. For the last five museums below, which are not

listed by Friedmann, Griscom, and Moore, I have used additional letters as follows:

- A. University of Michigan Museum of Zoology
- C. G. M. Sutton Collection
- D. Cornell University Collection
- E. Louisiana State University Museum of Zoology
- F. Museum of Comparative Zoology, Harvard University
- G. United States National Museum (including the United States Fish and Wildlife Service Collection)
- H. American Museum of Natural History
- L. Museo Nacional de Historia Natural, México, D.F. (only mounted birds examined)
- N. Chicago Natural History Museum
- P. Academy of Natural Sciences, Philadelphia
- Q. Princeton University Museum of Zoology
- R. University of Kansas Museum of Natural History
- S. Kansas State Historical Society, Topeka (mounted birds only, Goss Collection)
- T. Department of Fish and Game, Agricultural and Mechanical College of Texas, College Station

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I take especial pleasure in acknowledging my indebtedness to George B. Saunders of the U. S. Fish and Wildlife Service in providing up-to-date summaries, based chiefly on his numerous aerial surveys, of the status of migratory waterfowl and certain other birds in Veracruz. In a number of cases his data have shown that migrants supposed to be rare in Veracruz, or previously unrecorded there, are actually

regular and, in some cases, common. He has very generously permitted me to quote freely from his letter to me, dated August 25, 1953. In the Anatidae, such quotations are followed by "(Saunders)."

Dr. Alexander Wetmore very kindly furnished up-to-date vernacular names and also checked the scientific names appearing in the annotated and hypothetical lists of this report. These names are from the manuscript list of the A.O.U. Committee on Classification and Nomenclature. However, the writer alone is responsible for any errors.

Both the 1950 museum work and the 1952 field trip to México were made possible by joint grants from the Carnegie Foundation Research Fund and Centre College of Kentucky.

*Discussion.*—In an area as diversified as Veracruz, with its warm, partly arid, 400-mile coast line on the east, and its cool, predominantly humid mountains rising to peaks of more than 13,000 and 18,000 feet on the west, much remains to be learned about each migrant's geographical and ecological preferences while in México. Nevertheless, a few general remarks may be in order.

Certain continent-wide birds such as the Marsh Hawk (*Circus cyaneus*), Sparrow Hawk (*Falco sparverius*), Killdeer (*Charadrius vociferus*), and Lincoln's Sparrow (*Melospiza lincolni*) are found during the winter in unforested country throughout Veracruz, though more numerous at lower altitudes. In the case of most of the wide-ranging water birds and shore birds, the near absence of attractive bodies of water in the Veracruz mountains results in their being largely restricted to the coastal plain. As to the smaller land birds, we find that the highlands of west-central Veracruz (Mount Orizaba and Cofre de Perote districts) are the principal winter home in Veracruz of migrants from western North America. The following twenty forms, for example, are as yet unknown elsewhere in the state, even though nearly half of them have been found repeatedly in the Veracruz mountains.

- Black-chinned Hummingbird (*Archilochus alexandri*)
- Rufous Hummingbird (*Selasphorus rufus*)
- Northern Cassin's Kingbird (*Tyrannus v. vociferans*)
- Southern Say's Phoebe (*Sayornis s. saya*)
- Hammond's Flycatcher (*Empidonax hammondi*)
- Wright's Flycatcher (*Empidonax oberholseri*)
- Desert Rough-winged Swallow (*Stelgidopteryx ruficollis psammochrous*)
- Azure Common Bluebird (*Sialia sialis fulva*)
- Pacific Audubon's Warbler (*Dendroica a. auduboni*)
- Black-throated Gray Warbler (*Dendroica nigrescens*)

Townsend's Warbler (*Dendroica townsendi*)  
 Hermit Warbler (*Dendroica occidentalis*)  
 Northern Grace's Warbler (*Dendroica g. graciae*)  
 Common Bullock's Oriole (*Icterus b. bullockii*)  
 Brewer's Blackbird (*Euphagus cyanocephalus*)  
 Western Tanager (*Piranga ludoviciana*)  
 Nevada Savannah Sparrow (*Passerculus sandwichensis nevadensis*)  
 Rock Rufous-crowned Sparrow (*Aimophila ruficeps eremoeca*)  
 Western Chipping Sparrow (*Spizella passerina arizonae*)  
 Worthen's Sparrow (*Spizella wortheni*)

By comparison, the known Veracruz range of only two eastern North American forms is similarly restricted to the mountainous west-central part of the state. These two are the Acadian Flycatcher (*Empidonax virescens*) and Eastern Blue Grosbeak (*Guiraca c. caerulea*), the former being known from a single Veracruz specimen.

Because migrants from western North America nearly all winter in México and northern Central America, there are comparatively small numbers of them south of Veracruz at that season. Consequently, during the spring migration no pronounced increase in their numbers is apparent in Veracruz, an area which is, moreover, presumably not on the main flyway between Guatemala and the western United States. As a rule, migrants bound for western North America gradually disappear from Veracruz during April, whereas, in a great many cases, birds going to eastern North America not only remain well into May, but become noticeably commoner during the first days of that month, as their numbers are steadily augmented by individuals arriving from Central and South America. These were the transients with which the woods near Jalapa became increasingly alive, in 1939, until a peak was reached about May 5 to 10, suggestive of a fair-sized spring "wave" in New Jersey. Making allowances for the heavier foliage in México, the transients' comparative silence there, and the presence of so many native species which largely occupy one's attention, it seems to me altogether likely that at least as many transients pass through favorable parts of Veracruz as through most areas of comparable size in central or eastern United States. What might be considered supporting evidence for this surmise is found in the statement of Lowery (1951: 440) in his quantitative study of nocturnal bird migration: "April flight densities at Tampico are the highest recorded in the course of this study."

A point worth emphasizing is that migrants, at least in spring, are very plentiful not only along the Veracruz coast, but also on the eastern slopes of the mountains 50 or 60 miles inland. It should also

be stressed that the scarcity of records for certain species is undoubtedly due more to lack of sufficient field work than to the birds' rarity or absence in Veracruz. For examples of migrants recently found to be common, see summaries of the Ring-necked Duck (*Aythya collaris*) and Mourning Warbler (*Oporornis philadelphia*).

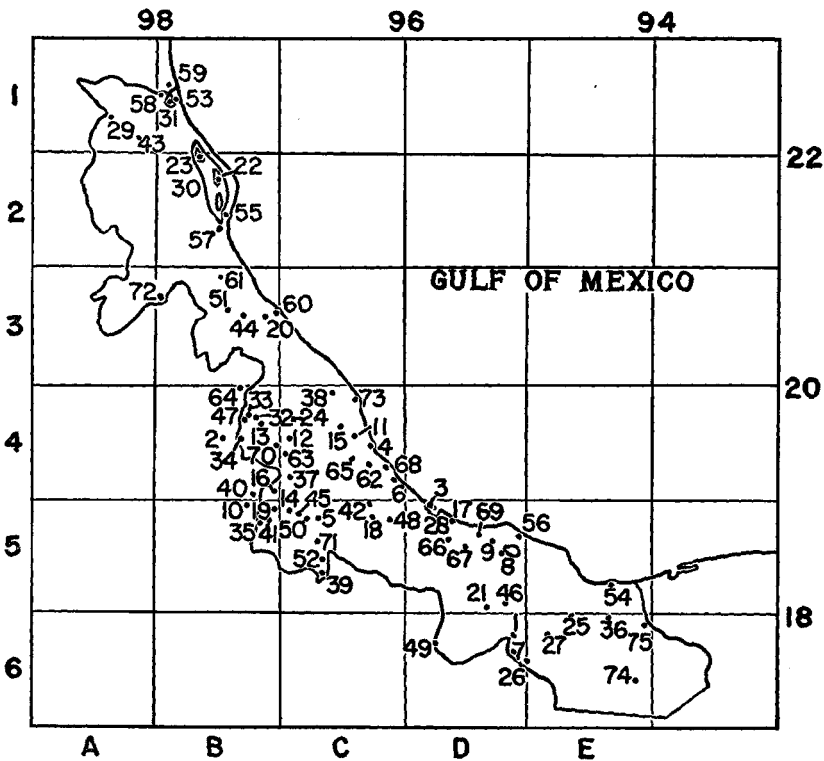


FIGURE 1. Sketch-map of state of Veracruz, México, showing localities numbered in the gazetteer.

*Gazetteer of Localities.*—The following place names are mentioned in this paper. Those here numbered are to be found on the accompanying sketch-map. For example, the approximate location of Achotal, number 1, may be found in square D-6. In most cases, the approximate altitude in feet is given after the place name. All localities are in Veracruz unless stated otherwise.

- 1 (D-6) Achotal, about 300 feet.
- 2 (B-4) Alchichica, Puebla, 8000 feet.
- 3 (D-5) Alvarado, sea-level.
- 4 (C-4) Antigua, near sea-level.
- 5 (C-5) Atoyac, 1500 feet.
- 6 (C-4) Boca del Río, sea-level.

- 7 (D-6) Buena Vista, about 200 feet.  
Cacalilao, near sea-level in state of Veracruz shortly west of Tampico.
- 8 (D-5) Catemaco, 1100 feet.
- 9 (D-5) Cerro de Tuxtla, rises to about 4000 feet.
- 10 (B-5) Chalchicomula, Puebla, 8200 feet.
- 11 (C-4) Chichicaxtle, 500 feet.
- 12 (C-4) Coatepec, 4100 feet.
- 13 (B-4) Cofre de Perote, rises to about 13,500 feet.
- 14 (C-5) Córdoba, 2800 feet.
- 15 (C-4) Corral Falso, about 4000 feet.
- 16 (B-4) Coscomatepec, 5000 feet.
- 17 (D-5) El Conejo, sea-level.
- 18 (C-5) El Faro, about 600 feet.
- 19 (B-5) Fortín, 3200 feet.  
Guadalupe Victoria, 8000 feet; about 3 miles west of Perote.
- 20 (B-3) Gutiérrez Zamora, about 200 feet.
- 21 (D-5) Isla, about 400 feet.
- 22 (B-2) Isla de los Frijoles, sea-level.  
Isla de los Pájaros. Presumably the same as Isla de los Frijoles.
- 23 (B-2) Isla Juana Ramirez, sea-level.
- 24 (C-4) Jalapa, 4500 feet.
- 25 (E-6) Jaltipán, 100 feet.
- 26 (D-6) Jesús Carranza, 200 feet.
- 4 (C-4) La Antigua (same as Antigua), near sea-level.
- 27 (E-6) La Buena Ventura, about 200 feet.
- 2 (B-4) Lago de Alchichica, Puebla, 8000 feet.  
Lago de Tamiahua. Apparently the same as Laguna de Tamiahua.
- 28 (D-5) Laguna Alvarado, sea-level.
- 29 (A-1) Laguna Cerro Pez, near sea-level.
- 30 (B-2) Laguna de Tamiahua, sea-level.
- 31 (B-1) Laguna Pueblo Viejo, sea-level.
- 73 (C-4) Laguna Verde, near sea-level.
- 32 (B-4) La Joya, about 7000 feet.  
Lake Tamiahua. Same as Lago de Tamiahua.
- 33 (B-4) Las Vigas, 8000 feet.
- 34 (B-4) Limón, 8000 feet.
- 35 (B-5) Maltrata, about 6000 feet.
- 36 (E-6) Minatitlán, 100 feet.
- 37 (C-4) Mirador, 3800 feet.
- 38 (C-4) Misantla, 1350 feet.
- 39 (C-5) Motzorongo, 800 to 2000 feet.
- 40 (B-4) Mount Orizaba, rises to 18,320 feet. Partly in Veracruz, but peak in Puebla.
- 74 (E-6) Nanchital, about 100 feet.
- 41 (B-5) Orizaba (city of), 4000 feet.  
Pajaros Island. Same as Isla de los Pájaros.
- 42 (C-5) Palma Sola, about 1700 feet.
- 43 (A-1) Pánuco, near sea-level.  
Papaloapan basin or Papaloapan delta, near sea-level. "Includes the vast complex of lagoons, marshes, and streams in the great delta south of Alvarado." (G. B. Saunders, *in litt.*)

- 44 (B-3) Papantla, 600 feet.  
45 (C-5) Paraje Nuevo, 1800 feet.  
46 (D-5) Paso Nuevo, about 300 feet.  
47 (B-4) Perote, 8000 feet.  
48 (C-5) Piedras Negras, 400 feet.  
49 (D-6) Playa Vicente, about 1500 feet.  
50 (C-5) Potrero, 1700 feet.  
Potrero Viejo, 1700 feet. About 1 mile south and 3 miles west of Potrero.  
51 (B-3) Poza Rica, about 500 feet.  
52 (C-5) Presidio, 1600 feet.  
53 (B-1) Pueblo Viejo, near sea-level.  
54 (E-5) Puerto México, sea-level.  
Río Coatzacoalcos, near sea-level. Flows by Jesús Carranza and Minatitlán to Puerto México.  
Río Pánuco, near sea-level. Flows by Pánuco to Tampico.  
Río Papaloapan. Flows in a northeasterly direction across the state to empty into Laguna Alvarado.  
55 (B-2) Romatlan. Rivera, near sea-level; location on sketch-map open to doubt. Not definitely determined, but said to be near Córdoba.  
75 (E-6) San José del Carmen, about 250 feet.  
26 (D-6) Santa Lucrecia, 200 feet. Old name for Jesús Carranza.  
56 (D-5) Santecomapan, about 500 feet.  
57 (B-2) Tamiahua, near sea-level.  
30 (B-2) Tamiahua Lagoon, sea-level. Same as Laguna de Tamiahua.  
58 (A-2) Tamós, near sea-level.  
59 (B-1) Tampico, Tamaulipas, sea-level.  
Tecamaluco, 4600 feet. A Sumichrast locality in mountains above the city of Orizaba.  
60 (B-3) Tecolutla, sea-level.  
61 (B-3) Tehuatlán, 700 feet.  
62 (C-4) Tejería, near sea-level.  
63 (C-4) Teocelo, 4000 feet.  
64 (B-4) Teziutlán, Puebla. The city itself is in Puebla, but in this report "east of Teziutlán" refers to birds collected by Melvin A. Traylor, Jr. in Veracruz along the highway to Nautla, mostly between altitudes of 4500 and 5000 feet.  
65 (C-4) Tierra Colorada, about 650 feet.  
66 (D-5) Tlacotalpam, near sea-level.  
67 (D-5) Tres Zapotes, 200 feet.  
68 (C-4) Veracruz (city of), sea-level.  
69 (D-5) Volcán San Martín, rises to about 5500 feet.  
70 (B-4) Xico (sometimes spelled Jico), 4100 feet up to 6500 feet on nearby mountains.  
71 (C-5) Xúchiles, about 1800 feet.  
72 (B-3) Zacualpilla, 6500 feet.

In the annotated list of North American migrants recorded from Veracruz, an asterisk (\*) preceding a bird's name signifies that every *original* Veracruz record for that form, so far as known to me, is here



listed. Two asterisks (\*\*) mean that while all Veracruz occurrences known to me are given, at least one record for each bird so designated is cited indirectly by reference to standard compilations like the *Biologia Centrali-Americana*, or Ridgway and Friedmann's *The Birds of North and Middle America*. Birds with no asterisk are usually common forms whose status is summarized without attempting to list each Veracruz record.

\*\*American Eared Grebe, *Colymbus caspicus californicus*.—Little known, but probably regular on mountain ponds at all seasons. Ferrari-Perez (1886: 179) took a young male at Jalapa in August, and Friedmann, Griscom, and Moore (1950: 13) state that it has been "collected in Veracruz in full breeding dress." On the Lago de Alchichica, Puebla, a crater lake shortly west of Limón, Veracruz, I counted 87 on July 20, 1952. Though many were in nuptial plumage, no half-grown young or other evidences of nesting were noted.

\*\*Atlantic Wilson's Petrel, *Oceanites oceanicus oceanicus*.—Presumably regular offshore. Beebe (1905: 19) noted several inside Veracruz harbor during a severe "norther" in late December. Friedmann, Griscom, and Moore (1950: 18) write: "Recorded off the coast of Veracruz."

White Pelican, *Pelecanus erythrorhynchos*.—Regular coastal winter visitant and inland transient. Chapman (1930: 184) in mid-March has noted "flocks containing thousands of birds passing northward along the eastern face of the Sierras of Vera Cruz." Recorded between November 12 (Low, Kay, and Rasmussen, 1950: 351) and April 16 (Wetmore, 1943: 232).

\*\*Gannet, *Morus bassanus*.—Probably casual in winter (*cf.*, Bent, 1922: 229; and Friedmann, Griscom, and Moore, 1950: 22). Beebe (1905: 381) reported Gannets seen from his steamer "all the way from Cape Hatteras to Vera Cruz."

(Northern) Great Blue Heron, *Ardea herodias (herodias)*.—The species is uncommon but regular at nearly all seasons, chiefly on coastal plain, sparingly up to 4500 feet or more. Noted by me only at Isla in mid-March, and near Tamós on July 1. Cooke (1946: 254) has recorded one banded at Imperial Beach, Saskatchewan, July 5, 1936, and recovered on January 24, 1938, at Lake Tamiahua.

\*Anthony's Green Heron, *Butorides virescens anthonyi*.—Status obscured by resident *virescens*, but perhaps a regular winter visitant. So far two records: a female from Piedras Negras, December 19 (Lowery and Dalquest, 1951: 546), and an Orizaba specimen listed by Oberholser (1912: 545).

\*American Bittern, *Botaurus lentiginosus*.—Rare in winter; the only records are from Córdoba (Sclater, 1856b: 310), Jalapa (Sclater, 1859a: 369), and Orizaba (Sumichrast, 1881: 233).

\*Eastern Least Bittern, *Ixobrychus exilis exilis*.—Probably a regular transient or winter visitant; may breed, but the only records so far are a male (wing 115 mm., tail 40, bill 46) and female (112, 36, 44), both taken near Rivera on April 12, 1904 (G).

Lesser Canada Goose, *Branta canadensis leucopareia*.—"Very local, but recorded regularly in winter surveys near Tampico. A few usually observed on flats near Tamiahua and on meadows in southern part of Papaloapan basin." (Saunders).

\*Athabaska Canada Goose, *Branta canadensis parvipes*.—Status uncertain; the type specimen from "Vera Cruz" seems to be the only state record.

Richardson's Goose, *Branta hutchinsii hutchinsii*.—"Rare in winter in coastal areas of northeastern Veracruz. Hunters in the Tampico area have reported killing

several very small Canada Geese. A specimen obtained at the Tampico public market from a local hunter, March 10, 1940, had been shot near Cacalilao, Veracruz." (Saunders).

Pacific White-fronted Goose, *Anser albifrons frontalis*.—"Regular but scarce and local in winter; more common as a transient, especially in northern Veracruz. Recorded regularly in the vicinity of Tampico and Tamiahua, and in the Papaloapan delta." (Saunders).

Lesser Snow Goose, *Chen hyperborea hyperborea*.—"Regular and fairly common in winter south to the Papaloapan delta (cf. Saunders, 1953: 84-85). See next species.

Blue Goose, *Chen caerulescens*.—"Regular but scarce in winter, usually in company with much larger numbers of Snow Geese. Most often observed near Tampico, but a few were usually recorded near Tamiahua and in the Papaloapan delta. On the January, 1947, aerial inventory, 37 were observed in the vicinity of Papaloapan; on the January, 1952, survey, 250 were recorded in that section." (Saunders.)

Northern Fulvous Tree Duck, *Dendrocygna bicolor helva*.—"Regular but very local in winter. Several hundred were usually recorded at lagoons near Tampico during winter surveys, and smaller numbers on marshes near Laguna de Tamiahua, freshwater lagoons near Veracruz, and marshes of the Papaloapan delta. Natives reported that small numbers nested in the vicinity of Laguna Pueblo Viejo and Laguna de Tamiahua, usually in clumps of *Spartina* (species?). I was never there in summer to try to verify this." (Saunders).

Common Mallard, *Anas platyrhynchos platyrhynchos*.—"Rare in winter in northeastern Veracruz, where several have been taken by hunters near Tampico. However, all of the experienced hunters there attest to the rarity of this species." (Saunders).

There is an old record for Jalapa (Sclater, 1859a: 369), and I have seen two Jalapa skins (L).

Gadwall, *Anas strepera*.—"Common in winter, especially in coastal lagoons of the northeastern part of state. Formerly the western side of Laguna de Tamiahua was the Gadwall's principal winter grounds on the coast of Veracruz, but recent changes in the available food supply have reduced its numbers there. It is also common in the Tampico lagoons, and to a lesser extent in the Papaloapan delta. Small numbers were observed in most of the other coastal marshes and freshwater lagoons." (Saunders).

Pintail, *Anas acuta*.—"Common to abundant in winter and migrations, chiefly in coastal waterfowl areas." (Saunders).

Green-winged Teal, *Anas carolinensis*.—"Common in winter, especially in the Tampico section and in the Papaloapan delta." (Saunders).

Blue-winged Teal, *Anas discors*.—"Abundant in migrations, common in winter." (Saunders).

Northern Cinnamon Teal, *Anas cyanoptera septentrionalium*.—"Fairly common in winter and migrations, but local. Most often recorded in small lagoons and marshes in the northeastern corner of the state." (Saunders).

Probably also regular in mountains: five Jalapa skins seen (L).

American Widgeon, *Mareca americana*.—"Common in winter and migrations, especially in the vicinity of Tampico, Laguna de Tamiahua, and in the Papaloapan delta. Three banded Baldpates reported from Veracruz." (Saunders).

I have seen an undated Orizaba specimen (G).

Shoveler, *Spatula clypeata*.—"Locally common in winter and migrations." (Saunders).

Remains until at least mid-April (*cf.* Chapman, 1914: 542).

Redhead, *Aythya americana*.—"Uncommon in winter, but more or less regularly observed in small numbers near Tampico, on Laguna de Tamiahua, and occasionally on Laguna Alvarado. One banded Redhead reported from Veracruz." (Saunders).

Two old undated specimens from Orizaba examined (F).

Ring-necked Duck, *Aythya collaris*.—"Locally common in winter and migrations in the Papaloapan delta. Small numbers observed regularly in the Tampico area. One banded Ring-neck reported from Veracruz." (Saunders).

Wetmore (1943: 236) recorded "about 300" in the Río Papaloapan on March 5 and "about 25" there as late as April 16, 1939. Previously, the only record was that of Sclater (1859a: 369), who recorded a Ring-neck from Jalapa under the name of "*Fuligula affinis*" (*cf.* Sclater and Salvin, 1876: 400).

Canvasback, *Aythya valisineria*.—"Regular but very local in winter, chiefly on northern coastal lagoons. Formerly Laguna de Tamiahua was a principal wintering ground of this species. In the past several years only small numbers have been observed in Veracruz, chiefly in Laguna de Tamiahua, lagoons near Tampico, and in the Papaloapan—Alvarado sector." (Saunders).

Taken at Laguna de Tamiahua as late as April 21 by Chapman and Fuertes (H, D, respectively).

Lesser Scaup, *Aythya affinis*.—"Abundant and widely distributed in winter and migrations, especially on coastal lagoons. The largest concentrations observed in recent years have been on Laguna de Tamiahua to the south of Isla Juana Ramirez. Very common in the Tampico area and in the Papaloapan delta." (Saunders).

Northern Ruddy Duck, *Oxyura jamaicensis rubida*.—"Regular but local in winter and migrations. Recorded each winter in the Tampico area, and usually small numbers were present on Laguna de Tamiahua and in the Papaloapan delta. A few remain all summer, according to local informants in the Tampico area." (Saunders).

There is an old September record for Jalapa (Ferrari-Perez, 1886: 174).

\*Hooded Merganser, *Lophodytes cucullatus*.—Probably rare or casual in winter; only two records: Jalapa (Sclater, 1859a: 369) and Orizaba (Sumichrast, 1881: 234).

\*(Northern) Swallow-tailed Kite, *Elanoides forficatus (forficatus)*.—Rare or casual transient; one record: two (presumably of nominate race) seen by Chapman (1898: 35) at Jalapa, March 29, 1897.

Mississippi Kite, *Ictinia mississippiensis*.—Little known, but probably a regular transient. Credited to Veracruz by Friedmann, Griscom, and Moore (1950: 50). I noted a flock of five at Jalapa, May 4, 1939, circling north quite near, so that color, including unmarked tail, shape, size, and manner of flight were all well seen. Davis and Morony (1953b: 360) record this kite from near Nanchital in April.

Northern Sharp-shinned Hawk, *Accipiter striatus velox*.—Regular, widespread, and not rare in winter. I have examined undated old skins of this race from Jalapa (F) and Orizaba (F). Wetmore (1943: 238) shot one near Tres Zapotes on April 7.

Cooper's Hawk, *Accipiter cooperii*.—Fairly common winter visitant, at least in central Veracruz. Seen as late as April 23 at Jalapa.

Western Red-tailed Hawk, *Buteo jamaicensis calurus*.—The species is not uncommon in winter in most parts of Veracruz. Specimens examined from Pánuco, March 2 (H) and Orizaba, November (F) are richly colored and best referred to *calurus*. Some form of *B. jamaicensis* nests at high altitudes. Presumably this would be *costaricensis*, but a male having the "testes minute" from the northern slope of Cofre de Perote at 10,500 feet, July 27, has been identified as *calurus* by Van Tyne (*cf.* Davis, 1945: 274), and also by J. W. Aldrich (T).

\*Texas Red-shouldered Hawk, *Buteo lineatus texanus*.—Rare or casual in winter. Recorded from Orizaba (Sclater, 1857a: 211, and Sclater and Salvin, 1869: 364). A young male, presumably of the subspecies *texanus*, which is the only form credited to Veracruz by Friedmann, Griscom, and Moore (1950: 55), was received by the U. S. National Museum a few years ago. It was taken in "Vera Cruz" by A. E. Colburn, December 31, 1900, on which date Colburn was in southwestern Veracruz.

Northern Broad-winged Hawk, *Buteo platypterus platypterus*.—Fairly common transient nearly throughout; probably winters regularly. I saw two at Jesús Caranza on March 19, and two at Las Vigas migrating with Swainson's Hawks on April 5 (latest spring date).

Swainson's Hawk, *Buteo swainsoni*.—Abundant transient in April. I noted 200 or more near Las Vigas on April 5, no less than 4200 near Jalapa on April 18, and two at Jalapa on April 23 (latest spring date). Two undated Orizaba skins examined (F). As yet, no fall or winter records.

\*Bald Eagle, *Haliaeetus leucocephalus*.—Status uncertain; probably a rare winter visitant. Added to the state list by Dr. George B. Saunders, who writes (*in litt.*): "Recorded on January 20, 1939, near the village of Tamiahua and on January 23, 1947, at the northern end of Laguna Alvarado."

American Marsh Hawk, *Circus cyaneus hudsonius*.—Common and well distributed from September until spring. Latest date May 11 (seen over marshes near city of Veracruz).

American Osprey, *Pandion haliaeetus carolinensis*.—Fairly common coastwise, at least from July 1 (one closely observed at Tamós) until May 30 at Alvarado (F). No evidence of nesting.

\*Prairie Falcon, *Falco mexicanus*.—Status uncertain. One sight record: a large pale falcon with contrasting blackish axillars dashed about thirty feet over my head on July 20, 1952, just outside of Limón.

\*Peregrine Falcon, *Falco peregrinus anatum*.—Only two records, but doubtless regular in small numbers, chiefly coastwise. The only Veracruz specimen was taken by Forbes at Palma Sola on November 15, 1937 (Lowery and Dalquest, 1951: 557). I observed an adult, quite close, flying along the beach at Veracruz, March 1, 1939.

Eastern Pigeon Hawk, *Falco columbarius columbarius*.—Less than ten records for the species, but it is probably regular and not uncommon on migration and in winter. The nominate race is apparently the only one to have been taken in Veracruz so far. Single birds (subspecies ?) were noted by me near Las Vigas on April 8 and Jalapa on April 13.

Northern Sparrow Hawk, *Falco sparverius sparverius*.—Common in winter and on migration throughout. Recorded "up to the summit of [Mount] Orizaba" (Stone, 1890: 214), but most numerous in lowlands. Summers locally and probably breeds in high mountains. I have seen single individuals near Perote on May 26 and June 27, 1939, and on July 20 and 21, 1952. Davis (1945: 274) has recorded a male with small testes taken at 10,500 feet on Cofre de Perote, July 30. Through Dr. Davis' courtesy, I examined this bird (wing 175 mm., tail 113), together with four taken on August 11 and 12 on the west slope (10,000 feet) of Mount Orizaba in Puebla, and agree with Dr. Van Tyne that they are nearer *sparverius* than *tropicalis*. Because of the dates and the somewhat intermediate characters of these specimens, it seems probable that the Sparrow Hawk breeds near Perote and on Mount Orizaba.

I know of no evidence of breeding in the lowlands other than the belief of Dr. Wetmore's native assistant that they nest in holes in palms (Wetmore, 1943: 243).

\*Little Sparrow Hawk, *Falco sparverius paulus*.—Probably a casual winter visitant;

one record: a male collected near Jalapa, October 19, 1946 (Lowery and Dalquest, 1951: 557).

\*\*Northern King Rail, *Rallus elegans elegans*.—Perhaps only casual; one record: Tlacotalpam (Ridgway and Friedmann, 1941: 85).

\*Northern Virginia Rail, *Rallus limicola limicola*.—Probably a regular winter visitant, but as yet known only from a Potrero Viejo, November 26, female (Lowery and Dalquest, 1951: 562), and four specimens taken by Chapman (1898: 36) at two marshes near Jalapa in the spring of 1897. I recently examined these Jalapa skins (H) and was unable to distinguish them from spring examples from the eastern United States.

\*Sora, *Porzana carolina*.—Few records, but doubtless regular and fairly common. Recorded from Orizaba (Sumichrast, 1881: 229); Tlacotalpam, February 29 (Wetmore, 1943: 247); and from near Potrero Viejo, October 26 (Lowery and Dalquest, 1951: 563). It has also been taken at Jalapa (L) and Laguna de Tamiahua, April 24, 1904 (G).

\*Florida Common Gallinule, *Gallinula chloropus cachinnans*.—Perhaps a local resident in suitable areas, but as yet known only from my observation of four individuals of this species near Isla on March 13 and 14, 1939.

\*Eastern American Oyster-catcher, *Haematopus palliatus palliatus*.—Presumably regular along northern coast, where it may breed. A male collected about 75 miles south of Tampico on the Gulf side of Laguna de Tamiahua, April 23, 1904 (G) is probably the basis for the Veracruz reference in Friedmann, Griscom, and Moore (1950: 89).

\*Semipalmated Ringed Plover, *Charadrius hiaticula semipalmatus*.—Common transient and winter visitant coastwise, but as yet sight records only. Dr. Robert W. Storer kindly informs me that he saw this species at Boca del Río on August 1, 1941. Noted by me at Veracruz: about 20 on August 7, 30 on August 9, 20 on February 28, 8 on March 1, and 16 on March 30; I also saw one at Puerto México on August 26.

Wilson's Thick-billed Plover, *Charadrius wilsonia wilsonia*.—A male taken by R. B. Lea on May 30, 1947, near Tamós had one testis greatly enlarged and two very distinct and one indistinct brood-patches (C). I saw four in this same area on June 30, 1952, and suspect it may breed there. The species is fairly common at the city of Veracruz, where I have never failed to find it during the summer, winter, or spring, though without obtaining evidence of breeding.

\*Belding's Thick-billed Plover, *Charadrius wilsonia beldingi*.—Probably accidental; one record from "Tacolutla" (= Tecolutla), August 27, Friedmann, Griscom, and Moore, 1950: 92).

Northern Killdeer, *Charadrius vociferus vociferus*.—Fairly common winter visitant until April 1 in open country nearly everywhere up to at least 9000 feet.

\*Atlantic American Golden Plover, *Pluvialis dominica dominica*.—Presumably a regular but uncommon spring transient. Specimens taken at Jalapa on an unknown date (Sclater, 1859a: 369) and on March 21 (Friedmann, Griscom, and Moore, 1950: 90). At Isla I saw and heard three on March 14 and one on March 27. Davis (1952b: 324) saw this species in April near Boca del Río.

Black-bellied Plover, *Squatarola squatarola*.—Common along coast in winter and on migration. Noted by me at Veracruz: 10 on August 7, 7 on August 9, 29 on February 28, 7 on March 1, 3 on March 30, and 5 on May 10.

\*American Ruddy Turnstone, *Arenaria interpres morinella*.—Common along the coast on migration and in winter, though known from sight records only. Near the city of Veracruz I counted 9 on August 7, 1 on August 9, 46 on February 28, 5 on

March 1, 14 on March 30, and 5 on May 10. Dr. George B. Saunders writes me that he has observed this species in autumn and winter near the city of Veracruz and near Alvarado.

Wilson's Common Snipe, *Capella gallinago delicata*.—Fairly common in passage and in winter, though representative migration dates are lacking. Noted by me only at Isla: a single bird on March 14. Undated Orizaba skin seen (F).

Long-billed Curlew, *Numenius americanus (americanus)*.—I have not attempted subspecific identification of specimens examined, but only the nominate race is credited to Veracruz by Oberholser (1918a: 191) and by Friedmann, Griscom, and Moore (1950: 94). Non-breeding birds are fairly common at all seasons in suitable areas. Flock of 39 seen near Tamós as early as June 30. Uncommon in mountains, as at Coatepec and Jalapa (two without dates, F).

\*Hudsonian Whimbrel, *Numenius phaeopus hudsonicus*.—Added to the state list by Dr. George B. Saunders, who writes (*in litt.*): "Regular spring transient along the coast. Recorded several times on laguna flats near Tamós during April and May. One was seen in the possession of a local hunter at Cacalilao on April 28, 1949."

Upland Plover, *Bartramia longicauda*.—Probably a regular, widespread transient, at least in spring. However, the only recent records known to me are those of Wetmore (1943: 249) and Davis (1952b: 324). I have seen old undated specimens from Mirador (G) and Jalapa (F). An apparently unpublished Tamaulipas record is one taken by Gillin at Tampico on April 1, 1923 (P).

Spotted Sandpiper, *Actitis macularia*.—Common between sea-level and 4000 feet from July 19 (Warner and Mengel, 1951: 291) until May 24 (Lowery and Dalquest, 1951: 564). Undoubtedly occurs up to 8000 feet or more, for I noted two on July 20 at Lago de Alchichica, Puebla.

\*Eastern Solitary Sandpiper, *Tringa solitaria solitaria*.—Probably common on migration and perhaps in winter, but the only critically determined Veracruz specimen known to me is the female from Tres Zapotes taken March 29 and recorded by Wetmore (1943: 250).

Western Solitary Sandpiper, *Tringa solitaria cinnamomea*.—Common on migration and perhaps in winter up to at least 4000 feet. Critically determined specimens are from Orizaba (F; G; both undated); Mirador, October, 1863 (G); and Tres Zapotes, March 29 (Wetmore, 1943: 250). The species was noted by me as early as August 4 near Presidio, and as late at May 11 near city of Veracruz.

\*Western Willet, *Catoptrophorus semipalmatus inornatus*.—A male taken by Fuertes on April 20, 1910, at Lago de Tamiagua is *inornatus* (D). This is apparently the only critically determined Veracruz specimen of the Willet, though *inornatus* was taken at nearby Tampico, April 11, 1904 (G). The old record for the vicinity of Orizaba (see Sclater, 1860: 253) probably belongs to this race also. The species was noted by me at Tamós on June 30 (one), at Veracruz on August 1 (one) and August 7 (three), and at Puerto México on August 26 (two).

Greater Yellowlegs, *Tringa melanoleucus*.—Common on migration and in winter, coastwise and inland. To be expected every month of the year. Recorded by Wetmore (1943: 250) and Brodkorb (1943: 37). Taken at Mirador (G), and at Potrero on March 19 (H). Noted by me in small numbers at Isla in March, at Veracruz on May 10, and at Tamós on June 30 and July 1.

Lesser Yellowlegs, *Tringa flavipes*.—Common to abundant on migration and in winter, coastwise and inland. Recorded recently by Wetmore (1943: 250) and Brodkorb (1943: 37), and long ago by Sclater (1859b: 393) from Playa Vicente in April. Plentiful at Isla in March, and a few noted at Veracruz on various dates between August 7 and May 10.

\*American Knot, *Calidris canutus rufa*.—Perhaps regular along coast in winter, but as yet only one record: from 25 miles south of Rivera, April 13, 1904 (G).

Pectoral Sandpiper, *Erolia melanotos*.—Regular but uncommon transient coastwise and inland. An apparently unrecorded specimen is a female from Isla de los Pájaros, April 24, 1904 (G). I noted three at Isla on March 14 and one at a mudhole a few miles inland from the city of Veracruz on May 11 (latest spring date).

\*White-rumped Sandpiper, *Erolia fuscicollis*.—Probably an uncommon to rare transient; but so far one sight-record only: one very closely seen both at rest and in rump-displaying flight while uttering its diagnostic call on the beach at Veracruz, May 10, 1939.

\*Baird's Sandpiper, *Erolia bairdii*.—Probably a regular spring and fall transient both coastwise and inland up to very high altitudes. Old records are from Jalapa and "Las Vegas" [=Las Vigas] (see Sharpe, 1896: 570). A loose flock of six was closely observed and heard at Veracruz on August 7, 1937.

Least Sandpiper, *Erolia minutilla*.—Common in migrations and winter along coast, less so inland. Recorded between July 18 at Boca del Río (T) and May 25 at Potrero Viejo (E). I noted small flocks at Veracruz in August, February, and March, at Puerto México in August, at Isla in March, and at Jesús Carranza in March.

\*Long-billed Dowitcher, *Limnodromus scolopaceus*.—Locally abundant in migrations and winter, coastwise and at favorable localities inland. In October, 1863, Sartorius took a female at or near Mirador (G). Dalquest took five March 20 to 21 near Jesús Carranza, and noted "flocks of hundreds . . . along the Río Coatzacoalcos in April" (Lowery and Dalquest, 1951: 564). I saw a few dowitchers, thought to be *scolopaceus*, at Veracruz in August and at Isla in March. G. B. Saunders informs me (*in litt.*) that he has seen dowitchers in winter near Veracruz, Alvarado, and Laguna Pueblo Viejo.

\*Stilt Sandpiper, *Micropalama himantopus*.—Presumably a regular transient, but as yet one sight record only: a flock of eight with Lesser Yellowlegs seen by me at Isla, March 14, 1939.

\*Semipalmated Sandpiper, *Ereunetes pusillus*.—Previously unrecorded, but probably regular along coast on migration and in winter. G. B. Saunders kindly informs me that he took one "near Tamós, September 27, 1939." I closely observed small flocks, confidently thought to be *pusillus*, at Veracruz on August 7 and 9, 1937, and August 1, 1952.

Western Sandpiper, *Ereunetes mauri*.—Fairly common on migration and in winter along coast; less common inland. Credited to Veracruz by Friedmann, Griscom, and Moore (1950: 99). I saw a few *Ereunetes*, thought to be *mauri*, at Veracruz in February, March, and early August; also at Puerto México on August 26 and at Isla on March 13.

Sanderling, *Crocethia alba*.—Common in winter and on migration along the coast; rare or casual inland: old records for Misantla and Jalapa cited by Salvin and Godman (1904: 386). I saw small numbers at Veracruz between August 1 and May 10, and at Puerto México on August 26.

\*American Avocet, *Recurvirostra americana*.—Apparently a rare winter visitant coastwise and inland; three records, all undated: Alvarado and Córdoba (Sumichrast, 1881: 233), and Mirador (G).

\*Wilson's Phalarope, *Steganopus tricolor*.—Probably a rare transient. The only record known to me is that of Schlegel (1864: 60) from "Vera Cruz."

American Herring Gull, *Larus argentatus smithsonianus*.—Common to abundant winter visitant along entire coast, August to May; uncommon to rare inland. I have

seen as many as 90 in one winter day at Veracruz harbor. Latest spring record May 10 at Veracruz. Cooke (1940: 250) has called attention to the number of returns of banded Herring Gulls from the Veracruz coast south to Puerto México and Tabasco, also an inland recovery from Coscomatepec.

\*California Gull, *Larus californicus*.—Rare or casual winter visitant; one old record from Alvarado (Ferrari-Perez, 1886: 179).

\*Ring-billed Gull, *Larus delawarensis*.—Regular and rather common locally, present nearly throughout the year. Recorded from Laguna Cerro Pez by Lowery and Dalquest (1951: 565). I saw two immature birds near Tamós on July 1, 1952, and one the next day along the coast about sixty miles south of Tampico. Dr. G. B. Saunders writes me that he has recorded it commonly in winter south of Tampico in state of Veracruz.

\*Western Black-headed Gull, *Larus ridibundus ridibundus*.—Accidental; one record as detailed by Friedmann, Griscom, and Moore (1950: 106), and previously recorded by Oberholser (1923: 438) and Lincoln (1925: 374).

Laughing Gull, *Larus atricilla*.—Locally common along the coast all year. Occurs regularly inland as far as Tlacotalpam (Wetmore, 1943: 251) and Minatitlán (Brodkorb, 1943: 38), and casually (?) to Jalapa (Ferrari-Perez, 1886: 179). No evidence of breeding, though apparently commoner, or perhaps just more widespread, in summer than in winter. Seen in June and July a short distance south of Tampico.

\*Franklin's Gull, *Larus pipixcan*.—Probably a regular coastal and inland transient, though not noticed until May 10, 1939, when I collected a male and female at Veracruz. Two others were seen at Alvarado on May 12. Dr. Robert W. Storer writes me that he saw "two adults in very ragged plumage, apparently non-breeding birds," near Boca del Río, August 1, 1941. Davis and Morony (1953b: 360) saw one or more near Nanchital in April.

\*Bonaparte's Gull, *Larus philadelphia*.—Probably regular, but so far the only record is that of Evenden (1952: 113): "One was flying over, and resting on, the waters of the Gulf of Mexico, off the end of the Río Panuco jetty, Tampico (Madera), Tamaulipas, March 1, 1951." Since the Río Pánuco at this point delimits Veracruz and Tamaulipas, this record applies equally to both states.

\*Eastern Gull-billed Tern, *Gelochelidon nilotica aranea*.—Probably regular on migration and in winter coastwise, at least in northern Veracruz, where it may breed. So far only one or two records. Friedmann, Griscom, and Moore (1950: 107) specify Pajaros Island, April 25, 1904, whereas I have examined a male (G) taken by Piper, Sheldon, and Sanford on the same date at "Isla de los Frijoles." Presumably these are one and the same. A previously unreported specimen from extreme southern Tamaulipas is a female shot by T. S. Gillin at Tampico, October 28, 1923 (P).

\*Forster's Tern, *Sterna forsteri*.—Probably a regular winter visitant, possibly breeding in northern Veracruz. A female of "*litoricola*" (ovary greatly enlarged, wing 247 mm., tail 140, culmen 37) was taken by Lea at a "swamp along Valles Road, 7 mi. W. of Tampico" on May 30, 1947 (C). In this same area on July 1, 1952, I saw and heard at least twenty Forster's Terns, nearly all of which were in non-breeding plumage. I have also seen two undated mounted birds from Pueblo Viejo (L).

Northern Common Tern, *Sterna hirundo hirundo*.—Probably regular on migration and in winter. Four were taken at Minatitlán, April 25 and 26 (Brodkorb, 1943: 38); Friedmann, Griscom, and Moore (1950: 108) mention April and May 30 occurrences; and Campbell (1940: 89) records one banded near Toledo, Ohio, on July 12, 1930, which was recovered on October 31, 1930, at Puerto México. Robert W. Storer writes me that he carefully "looked over a large number on the beach" at Boca del



Río on August 1, 1941. I saw at least two at Tamós on July 1, 1952, this being very close to where Gillin collected a male, June 12, 1923 (P).

\*Eastern Least Tern, *Sterna albifrons antillarum*.—Status uncertain; possibly breeds. The only Veracruz specimen known to me is the male from Boca del Río recorded by Warner and Mengel (1951: 291). It has only two dusky outer primaries and the bill is black-tipped (C). The species was noted by me at Veracruz: 2 on August 7 and 1 on May 10; also, just north of the state line, on June 26, 1952, when 15 were seen at Tampico (Miramar). Dr. R. W. Storer noted some near the city of Veracruz on July 31 and August 1, 1941 (*in litt.*), and G. B. Saunders writes me that he has seen it on numerous late winter and early spring trips south of Tampico.

American Royal Tern, *Thalasseus maximus maximus*.—Fairly common along entire coast throughout the year; may breed. Casual at Jalapa (Ferrari-Perez, 1886: 179).

\*\*Cabot's Sandwich Tern, *Thalasseus sandvicensis acutiflavus*.—Present in small numbers along coast during most of year. Saunders (1896: 75) lists specimens from Laguna Verde and La Antigua, while Friedmann, Griscom, and Moore (1950: 111) have "Veracruz (winter records)." I saw up to twenty a day at Veracruz in early August, 1937. R. W. Storer writes me that he observed the species at Boca del Río on August 1, 1941.

\*Caspian Tern, *Hydroprogne caspia*.—Apparently rare, but probably a regular winter visitant coastwise. Recorded from Laguna Cerro Pez by Lowery and Dalquest (1951: 565). Dr. George B. Saunders writes (*in litt.*): "Recorded in winter near Tampico in state of Veracruz."

American Black Tern, *Chlidonias niger surinamensis*.—Common coastal transient, at least when southbound. Appears as early as July 1 (two closely observed at Tamós). I have seen up to fifty a day at Veracruz in August, but have no spring record. To be expected far inland.

\*Northern Black Skimmer, *Rynchops nigra nigra*.—Status uncertain; may breed locally, but so far only two specimens: a male taken at Lago de Tamiahua, April 20, 1910 (D), and an immature, able to fly, collected at Alvarado, date unknown (L). G. B. Saunders writes (*in litt.*): "Recorded in winter south of Tampico in Veracruz."

Eastern Mourning Dove, *Zenaidura macroura carolinensis*.—Widespread and fairly common on migration and in winter. There is unquestionably a late spring passage of *carolinensis* along the coastal plain. Brodtkorb (1943: 38) lists April 24 and 26 specimens from Minatitlán. Wetmore (1943: 252) states that Carriker did not find the species until May 1, but on May 2 "a typical specimen of the eastern form" was secured.

Western Mourning Dove, *Zenaidura macroura marginella*.—Fairly common transient and winter visitant from sea-level to at least 9000 feet; may breed in mountains and perhaps in northern lowlands. Traylor shot a female, ovary enlarged, at 8500 feet near Perote, September 3, 1948 (N). I noted a few singing Mourning Doves (race?) at Jalapa in late April, but none there or at Las Vigas and Perote in late May, June, July, or August. In extreme northern Veracruz, however, I saw one (race?) at Tamós, July 1, 1952.

Like *carolinensis*, *marginella* is represented along the coastal plain by May migrants. I saw none at Veracruz during two March visits, but took a female (wing 147 mm., tail 132, ovary enlarged) from a flock of seven on the beach at Veracruz, May 10. Seven there the next day and six at Alvarado on May 12 may have belonged to either northern race.

\*Passenger Pigeon, *Ectopistes canadensis*.—Formerly wintered south casually to Jalapa and Orizaba (Sanchez, 1878: 104).

Eastern Yellow-billed Cuckoo, *Coccyzus americanus americanus*.—Subspecifically identified Veracruz skins belong to nominate race, but *occidentalis* should also occur. *C. a. americanus* probably breeds in extreme north, Gillin having taken it at Tampico, June 11, 1923 (P), and I found one (race?) in full song at nearby Tamós, June 30, 1952. Farther south, in central Veracruz mountains, absence of June records indicates transient status, though I saw the species as late as May 22 at Córdoba. Occurs in small numbers from sea-level up to 8000 feet or more as a transient, chiefly in May. Returns to central Veracruz in August. As yet, no winter record.

\*Black-billed Cuckoo, *Coccyzus erythrophthalmus*.—Probably an uncommon but regular transient. Recorded from Orizaba by Sclater (1857a: 214 and 1860: 252) and by Sumichrast (1881: 239). I collected one at Jalapa on April 24 (D) and observed another there on May 6, 1939. R. B. Lea took one near Potrero on April 17, 1947 (C). Davis and Morony (1953a: 353) list it as seen near San José del Carmen.

\*Northern Short-eared Owl, *Asio flammeus flammeus*.—Rare or casual winter visitor; one record from vicinity of Orizaba (Sclater, 1857a: 212).

\*Chuck-will's-widow, *Caprimulgus carolinensis*.—Doubtless regular on migration and in winter, but easily overlooked. Four records: the April 9 and April 21 specimens recorded by Wetmore (1943: 261), the August 22 male taken at about 5000 feet, east of Teziutlán, by Traylor (1949: 270–271), and an April sight-record by Davis and Morony (1953b: 360) near Nanchital.

Eastern Whip-poor-will, *Caprimulgus vociferus vociferus*.—Regular in winter and on migration between 1500 and 7000 feet. Old specimens, like one from Orizaba (F) are undated. Friedmann, Griscom, and Moore (1950: 156) list four Veracruz dates. Others are April 1 (male, wing 148 mm.), April 10 (male, wing 150), and April 18 (female, wing 154), all taken by Chapman at Jalapa (H), and December 7 at Motzorong (Lowery and Dalquest, 1951: 581).

\*Merrill's Pauraque, *Nyctidromus albicollis merrilli*.—Doubtless regular in winter. Critically determined specimens include a male from Presidio, December 2 (Lowery and Dalquest, 1951: 579), a female from Mirador, February 7, 1894 (G), a male from Río Pánuco, April 5, 1942 (P), and the male from Tres Zapotes, March 10 recorded by Wetmore (1943: 260).

\*Howell's Common Nighthawk, *Chordeiles minor howelli*.—Presumably a regular transient; one record: a male (wing 194 mm., tail 113) taken at Pueblo Viejo on May 10, 1923 (P).

\*Cherrie's Common Nighthawk, *Chordeiles minor aserriensis*.—Status uncertain. Warner and Mengel (1951: 292) mention seeing and hearing *Chordeiles minor* every evening during their stay at Boca del Río, July 15 to 21, 1942. The only nighthawk collected there, by R. E. Stone on July 23, is an immature female provisionally identified as *aserriensis* by Dr. Wetmore. When examining this bird in 1950 (T), I obtained the following measurements: wing 177 mm., tail 104. Quite possibly this individual, the only Veracruz *aserriensis* known to me, may have been an early transient, because a female taken on July 5, 1930, from her nest with two eggs on the beach near the city of Veracruz, only about twenty kilometers from Boca del Río, has been identified as *chapmani* by Oberholser, Charles H. Rogers (who collected her), and me (Q). Individual variation being so great in this species, more breeding material from coastal Veracruz is needed. Certainly, as Warner and Mengel (*loc. cit.*) point out, *chapmani* is hardly the nesting form to be expected at Veracruz.

I might add that in 1952 I found no nighthawks at Veracruz during a brief visit from July 30 to August 2, but saw and heard a few in the Tampico region in late June and early July.

\*\*Chimney Swift, *Chaetura pelagica*.—Common transient, at least in spring, from sea-level to an altitude of 4500 feet or more. Veracruz specimens, in addition to those mentioned by Friedmann, Griscom, and Moore (1950: 158), are from near Potrero, April 16 (C), from near Jesús Carranza, April 10 (Lowery and Dalquest, 1951: 581), and from Pueblo Viejo, April 5, when George F. Breninger noted swifts "crossing the lagoon all day, going north." (See Lincoln, 1944: 605.)

The Chimney Swift's twittering notes are sufficiently different from those of *vauxi* (including *richmondi* and, presumably, *tamaulipensis*) that I feel quite confident most if not all of the following *Chaeturae* were *pelagica*. In each case they were calling as they moved steadily northward at no great distance from me, their size and color seemingly just right for Chimney Swifts. At Coatepec: about 90 on April 11, 13 on April 17, and 13 on May 5; at Jalapa: 10 on April 13, about 220 on April 23, 20 on April 29, 5 on May 1, 20 on May 3, 7 on May 6, 5 on May 8; at Veracruz: 15 on May 11; at Alvarado: 13 on May 12.

L. Irby Davis (1952a: 315) noted some near Catemaco in April.

\*Northern Vaux's Swift, *Chaetura vauxi vauxi*.—Status uncertain. Credited to Veracruz by Friedmann, Griscom, and Moore (1950: 159). The only specimen known to me is a male taken by Nelson and Goldman at Motzorongo, February 25, 1894 (G). Sumichrast (1881: 250) lists this swift for Río Seco near Córdoba, but may have mistaken it for another *Chaetura*.

Ruby-throated Hummingbird, *Archilochus colubris*.—Rather common nearly throughout in winter and on migration, from September 6 (a male from just north of the line at Tampico; P) until May 5 (male from Catemaco; G).

\*Black-chinned Hummingbird, *Archilochus alexandri*.—Perhaps regular in winter in the high mountains, but so far just one record: a female from Las Vigas, April 2 (Sutton and Burleigh, 1940a: 238).

\*\*Rufous Hummingbird, *Selasphorus rufus*.—Probably rare or casual in winter, found only by Sartorius at Mirador (Ridgway, 1911: 613).

Eastern Belted Kingfisher, *Megaceryle alcyon alcyon*.—Locally not uncommon in winter and on migrations up to 4500 feet or more. Remains until at least March 29.

Eastern Yellow-bellied Sapsucker, *Sphyrapicus varius varius*.—Fairly common winter visitant until April 16 (Jalapa; H). Nearly all records are from between 4000 and 8000 feet, an exception being an April 11 female from Pueblo Viejo near sea-level (N).

\*Eastern Kingbird, *Tyrannus tyrannus*.—Generally overlooked, but doubtless a regular transient along coastal plain, at least in August. Sumichrast (1869: 557) considered it quite rare but had seen lowland specimens. Sclater (1859b: 383) recorded it from Playa Vicente in May. These seem to be the only records prior to 1937, when I noted one at Veracruz on August 8, one at Jesús Carranza on August 25, and four at Puerto México on August 26. Davis and Morony (1953b: 360) list an April record from near Nanchital.

\*\*Northern Cassin's Kingbird, *Tyrannus vociferans vociferans*.—A little known winter visitant in the mountains, recorded only from Orizaba (undated skins; F; G) and Mirador (Ridgway, 1907: 696). It probably reaches Veracruz by late July, since there is a July 22 specimen (T) from near Tlaxcala, 7500 feet, state of Tlaxcala. Sumichrast (1869: 557) confused this species with the abundant *T. melancholicus*.

Scissor-tailed Flycatcher, *Muscivora forficata*.—Common transient, late March to mid-May and again in October, chiefly along coastal plain, more rarely in highlands: one Orizaba specimen (F), and seen by Stone (1890: 214) near Chalchicomula, Puebla, 8200 feet. Probably winters rarely and locally: a December 17 male re-

corded by Lowery and Dalquest (1951: 607). Earliest dated spring specimen March 19 (H), though in February Carriker saw what was probably a wintering pair near El Conejo, where on May 15 he shot a female, the latest spring record for the state (Wetmore, 1943: 285). I found Scissor-tails still common at Veracruz on May 11.

\*Northern Great-crested Flycatcher, *Myiarchus crinitus boreus*.—The only critically determined Veracruz specimens of this race are a female I took at Jalapa on April 25, 1939 (D), and a May 7 specimen obtained by Carriker on Cerro de Tuxtla (Wetmore, 1943: 289). Either this or the nominate race was observed daily by Dr. Wetmore (*loc. cit.*), March 19 to 22, while I noted the species as follows: single individuals at Veracruz on February 28 and March 1, and at Jalapa on April 29. Two mounted, undated specimens (race?) from Orizaba seen (L). Davis (1952a: 315) recorded the species in April, seven miles south of Catemaco, and Davis and Morony (1953a: 353 and 1953b: 360) saw the species near San José del Carmen and Nanchital, respectively.

\*Southern Great-crested Flycatcher, *Myiarchus crinitus crinitus*.—The only definite Veracruz records for this form are the males taken by Brown at Motzorongo on February 9 and 22 (Bangs and Peters, 1927: 478). The species is probably an uncommon winter visitant and transient.

\*\*Northern Ash-throated Flycatcher, *Myiarchus cinerascens cinerascens*.—Uncommon winter visitant nearly throughout, doubtless usually overlooked because of its resemblance to the common resident *M. tuberculifer*. Dated specimens known to me are February 10 at El Conejo (Wetmore, 1943: 289), February 14 at Chichicaxtle (G), and March 6 at Corral Falso (Brodkorb, 1948: 35). It has also been taken at Mirador, Papantla, Playa Vicente, and Orizaba, as cited by Ridgway (1907: 626).

Eastern Phoebe, *Sayornis phoebe*.—Fairly common winter visitant, as yet unrecorded in Veracruz above 4500 feet. Latest date for northern Veracruz is March 18 at Río Pánuco (P), for central, March 15 at Antigua (F).

Southern Say's Phoebe, *Sayornis saya saya*.—Rather common winter visitant in highlands. The July 30 male taken by T. Moore at Guadalupe Victoria, 8300 feet, had small testes and was probably an early migrant, as suggested by Davis (1945: 277). Dalquest found it "common on the desert near Limón and Perote in October and November" (Lowery and Dalquest, 1951: 606). Latest seen by me was near Las Vigas on April 8.

Yellow-bellied Flycatcher, *Empidonax flaviventris*.—Decidedly common on migration up to at least 5000 feet; regular winter visitant, at least below 2000 feet. Extreme dates are August 14 and May 28. Traylor collected no less than eight east of Teziutlán (4000–5000 feet) between August 19 and 26, 1948 (N). I took specimens at Paraje Nuevo on August 14 and 16, 1937, and Sartorius one at Mirador, August 20 (G). Most individuals pass farther south, but winter records include January 25 at Jesús Carranza (G), February 3 at Presidio (F), and February 23 at Motzorongo (G). In the spring of 1939, I saw nothing that could possibly be *flaviventris* until May 5, but almost daily from then until May 18 one or two yellowish *Empidonaces* thought to be this species were seen and often heard calling. Confirmatory specimens secured on May 8 at Jalapa and May 15 at Córdoba. Lowery and Dalquest (1951: 610) record skins from Fortín May 25 and Jalapa May 28, this last date having been equalled many years before by Nelson and Goldman at Tlacotalpam (G).

\*Acadian Flycatcher, *Empidonax virescens*.—Apparently a rare transient; only one satisfactory record: a female from Jalapa, taken by Nelson and Goldman, May 10, 1901 (G).

\*Little Traill's Flycatcher, *Empidonax traillii brewsteri*.—Status uncertain; one

record: a male (testes somewhat enlarged, wing 70 mm., tail 59; E) taken by Newman at Jalapa on May 27, 1949 (Lowery and Dalquest, 1951: 611).

\*\*Alder Traill's Flycatcher, *Empidonax traillii traillii*.—Doubtless a regular spring and fall transient in limited numbers. Critically determined specimens include a May 15 male from El Conejo (Wetmore, 1943: 290) and two skins taken by Traylor east of Teziutlán, August 19 and 27 (N). The species (race?) was seen and heard calling by me at Coatepec, May 5, 1939.

Ridgway (1907: 558) apparently thought that the *Empidonax pusillus* said by Sumichrast (1869: 557) to be "quite common around Orizaba in . . . June and July" was *E. traillii*. Probably Sumichrast's bird was *E. albigularis*, which he failed to list even though it is a rather common breeder at Orizaba.

Salvin and Godman (1897: 71) report *E. traillii* (race?) taken at or in Vera Cruz by Richardson.

Least Flycatcher, *Empidonax minimus*.—Common on migration and in winter nearly throughout, though as yet unrecorded in Veracruz above 5000 feet. Earliest dates are August 3 and 4 (Traylor at Ojochico near Córdoba; N). Winter records, too numerous to list, are all from below 2000 feet. Common well into May, occasionally singing (as at Jalapa, May 4). Taken by me at Jesús Carranza on August 23, at Jalapa on May 1, at Veracruz on May 10, and at Córdoba on May 14 and 17 (latest spring date for state).

Hammond's Flycatcher, *Empidonax hammondii*.—Fairly common in winter and on migration, though unrecorded below 3500 feet. Extreme dates are September 5 (two taken at Las Vigas by Traylor; N) and April 26 (Las Vigas, Isham; H). I have examined a "June 1864" Sartorius specimen from the "high pines" above Mirador (G), either misdated or representing a non-breeding straggler. Other localities are Orizaba, January 1 (F; G), Coscomatepec, March 7 and 8 (H), and Jalapa, March 20 (Moore, 1940: 355). Taken by me only at Las Vigas on April 10 (D).

\*Wright's Flycatcher, *Empidonax oberholseri*.—Apparently a rare winter visitor; only one satisfactory record: Orizaba, January 26, 1894 (G). Sumichrast (1869: 557) lists it for the state, without definite data.

Eastern Wood Pewee, *Contopus virens*.—Fairly common transient, chiefly in the mountains, from April 10 (Potrero; H) to mid-May, and again from mid-August (I took one at Orizaba, August 13). Isham collected two at Jalapa in mid-April (F), and Nelson and Goldman one there on May 10 (G). Pewees singing typical *virens* songs noted at Orizaba on August 15; at Jalapa on April 13 and 29, May 4 (taken), and May 8 (two); at Coatepec on April 17 (two); at Xico on May 7; at Veracruz on May 10 (six) and May 11 (four); at Córdoba on May 19 (two).

Western Wood Pewee, *Contopus richardsonii richardsonii*.—Presumably a regular transient, though critically determined specimens are few. I have examined a male (wing 83 mm., tail 63, culmen 13, testes not enlarged) from near Potrero, April 14 (C).

Olive-sided Flycatcher, *Nuttallornis borealis*.—Quite common transient throughout, though partial to highlands. One winter record: a male from Potrero Viejo, January 23 (Lowery and Dalquest, 1951: 610). On April 4, at about 9800 feet Sutton took a male which is the earliest spring, as well as the highest, Veracruz specimen (Sutton and Burleigh, 1940a: 239). Most numerous from late April to May 19. Southbound, it has been collected in Veracruz, at about 5000 feet, east of Teziutlán, as early as August 19 (Traylor; N). Noted by me at Paraje Nuevo on August 16, at Jesús Carranza on August 21, at Jalapa on May 6 and 8 (three, separately), at Xico on May 7 (two), and at Córdoba on May 22 (latest spring date).

\*Northwestern Vermilion Flycatcher, *Pyrocephalus rubinus flammeus*.—Status un-

certain. Two males from Tejería, March 9 and 13, 1941, have been recorded by Brodkorb (1948: 35) as belonging to this race.

Tree Swallow, *Iridoprocne bicolor*.—Locally abundant in winter and on migration chiefly below 5000 feet, remaining at least until late March. Baird (1866: 298) lists two specimens reputedly taken by Sartorius in the "Pine region above Mirador, Mex." during June, 1864.

\*Common Bank Swallow, *Riparia riparia*.—Probably a regular transient in small numbers, but as yet known from only one sight record: twelve in a loose flock of northbound swallows at Jalapa on May 6, 1939. Breast bands and characteristic calls were clearly noted as they circled nearby after I had ineffectually fired my last two shells at them.

Northern Rough-winged Swallow, *Stelgidopteryx ruficollis serripennis*.—Status obscured by other races. A satisfactory specimen of the northern race, which is presumably regular in winter, is a female (wing 98 mm.) from Tlacotalpam, February 7, 1901 (H).

\*Desert Rough-winged Swallow, *Stelgidopteryx ruficollis psammochrous*.—Status uncertain. The only Veracruz specimen known to me is U. S. National Museum No. 352,779 identified as *psammochrous* by Dr. Oberholser in 1937. It is an adult (wing 118 mm., sex and date not on label) taken by Botteri at Orizaba, and distinctly paler above than *serripennis* and *fulvipennis* of comparable antiquity.

American Barn Swallow, *Hirundo rustica erythrogaster*.—As a transient, abundant along coast, common inland up to at least 8500 feet. Said to arrive about mid-February (Dugès, 1899: 357). First noted by me on March 8 at Jesús Carranza; maximum 345 at Veracruz on May 11; still migrating over marshes at Veracruz on May 27. In southward flight first noted at Veracruz on August 7, abundant by August 26 (240 counted at Puerto México in a short time). Date of disappearance not known; nor is there any winter record as yet.

Small numbers summer, and quite likely breed, at high altitudes, as at Perote.

*Petrochelidon* (species?).—Chapman (1898: 27) noted "a species of *Petrochelidon*, whether *lunifrons* or *melanogaster* I cannot say" at Jalapa in the spring of 1897. A few migrating swallows of this genus noted by me on several dates between March 19 at Jesús Carranza and May 26 at Perote, also on August 30 at Atoyac.

For many years it has been erroneously assumed that the Lesser Cliff Swallow, *P. pyrrhonota tachina*, breeds south to the mountains of Veracruz. This assumption is seemingly based almost altogether on the first and, so far as I am aware, only Veracruz specimen of *Petrochelidon*: U. S. National Museum No. 33,572 taken by Sartorius at or near Mirador in August, 1863 (see Baird, 1866: 290). As Hellmayr (1935: 32, footnote) has pointed out, an August specimen of an early migrant like *Petrochelidon* is no evidence whatever of breeding. Neither is the statement of Sumichrast (1869: 547): "*Petrochelidon Swainsonii*. Region of the plateau. This species, peculiar to the plateau, is rarely found within the department." Curiously, this same Mirador specimen was listed by Ridgway (1904: 52) without a question mark not only in the synonymy of *melanogaster*, but of *tachina* as well (*op. cit.*: 51)! What Hellmayr failed to realize is that this Mirador specimen is not *tachina* at all, but *melanogaster*, for its forehead is cinnamon-rufous (G). Its measurements are definitely too large for *minima* van Rossem and Hachisuka, the wing being 108 mm., and the tail 46.

Veracruz, therefore, should be deleted from the breeding range of *tachina*, a form not yet taken in the state even as a transient. Whether or not *melanogaster* nests in Veracruz remains to be determined.

\*Northern Purple Martin, *Progne subis subis*.—Little known, but probably a

regular transient coastwise. Sumichrast (1869: 547) wrote: "Resident in the alpine region to which it seems to confine itself." Apparently on this basis, the A. O. U. Check-List (4th ed., 1931: 219) included Veracruz in its breeding range, but this should be changed, since recent field-workers have failed to find it in the Veracruz mountains. The only Veracruz specimens known to me are four males taken by Nelson and Goldman not far from the coast at Catemaco, May 2 to 4, 1894 (G). At Puerto México on August 26, I noted at least twelve, including several unmistakable adult males.

\*Eastern House Wren, *Troglodytes aëdon aëdon*.—Probably only casual in winter. The sole record is that published by Wetmore (1943: 300) of a male taken January 20 at Tres Zapotes.

Western House Wren, *Troglodytes aëdon parkmanii*.—Common in northern and central Veracruz up to 9000 feet, October 9 to May 6. A February 6 female from Tlacotalpam (H), a March 7 specimen from Paso Nuevo (F), and those from Tres Zapotes (Wetmore, 1943: 300-301) represent the southern limits of this species' known winter range.

\*Prairie Marsh Wren, *Telmatodytes palustris dissaëptus*.—Little known winter visitant, perhaps regular, but easily overlooked. Chapman (1898: 23) collected three at Jalapa, where Isham secured a female on April 15, 1897 (F). Perhaps Sallé's two specimens from Romatlan, recorded by Sclater (1856b: 290) as *Troglodytes palustris* (Wilson), belong here.

Catbird, *Dumetella carolinensis*.—Fairly common in winter and common on migration up to at least 4500 feet. Latest spring date is May 17 (three seen at Córdoba; one singing). Some of the less publicized specimens come from Río Pánuco, February 19 (P); Pánuco, March 19 (H); Papantla, March 6 (G); Misantla, December and January (N); and Achotal, February 27 (N).

\*Eastern Robin, *Turdus migratorius migratorius*.—Apparently only a casual winter visitant, though status obscured by resident highland form, *phillipsi*, which performs a limited vertical migration. Old records of *propinquus* all seem to belong to *phillipsi*. Only records for the nominate race are Tres Zapotes, February 28 (Wetmore, 1943: 303) and Orizaba, no date (Duvall, 1945: 627-628).

\*\*Wood Thrush, *Hylocichla mustelina*.—Regular on migration and in winter, but not common. Old records are from Córdoba (Sclater, 1856b: 294), Jalapa (Sclater, 1859a: 362), and state of Veracruz (Sumichrast, 1869: 543). Wetmore (1943: 305) records three from near Tres Zapotes and two on Cerro de Tuxtla; Bent (1949: 122) specifies "Matzorongo" [= Motzorongo]; and Lowery and Dalquest (1951: 622) list two, April 2 and 3, from southeast of Jesús Carranza. I have seen an undated Orizaba male (F).

Audubon's Hermit Thrush, *Hylocichla guttata auduboni*.—Fairly common winter visitant in mountains down to 4000 feet, rare or casual near sea-level in southern Veracruz, as at Santa Lucrecia, January 24, 1904 (G). Latest date April 25 at Las Vigas (F). Sumichrast (1869: 542), who claimed he "obtained it all seasons," probably did not always distinguish it from the very similar resident, *Catharus occidentalis*. I noted Hermit Thrushes only at Las Vigas (a female of *auduboni* taken on April 4) and Jalapa (one seen on April 13). Chapman took a female at about 9500 feet on Mount Orizaba, March 23 (H).

Russet-backed Swainson's Thrush, *Hylocichla ustulata ustulata*.—Apparently rare but regular in winter and on migration. Three satisfactory records are Tres Zapotes, January 29 (Wetmore, 1943: 305), Potrero, February 25 (R), and Potrero Viejo, May 15 (E), the last two published by Lowery and Dalquest (1951: 623). Probably

some of the old records for "*Turdus swainsonii*" belong here, as presumably does the Misantla bird mentioned by Bent (1949: 172). The species (race?) was seen near Catemaco in April by L. Irby Davis (1952a: 315).

Olive-backed Swainson's Thrush, *Hylocichla ustulata swainsoni* (includes *almae*).—Probably a rare but regular transient. Old records for "*Turdus swainsonii*" may or may not belong here. The only critically determined specimens are Chapman's from Las Vigas (H), Brown's from Presidio, May 6 (Bangs and Peters, 1927: 482), R. B. Lea's from near Potrero, April 19, 1947 (C), and Carriker's from Volcán San Martín, April 16 (Wetmore, 1943: 305).

Azure Common Bluebird, *Sialia sialis fulva*.—Status obscured by resident *guatemalae*, but probably a regular winter visitant in mountains. Critically determined, but undated, specimens in the Museum of Comparative Zoology are No. 12,279 from Jalapa, and No. 31,908 from Orizaba.

\*Tamaulipas Common Bluebird, *Sialia sialis episcopus*.—Status uncertain; one record: a male taken near Jalapa on October 18, 1946 (Lowery and Dalquest, 1951: 623). I obtained the following measurements: wing 98 mm., tail 67 (R), and agree that its size and coloration indicate *episcopus*, though I suspect its being just a small example of the similarly colored resident race, *guatemalae*.

Eastern Blue-gray Gnatcatcher, *Poliophtila caerulea caerulea*.—Common winter visitant nearly throughout, though perhaps present at high altitudes only during migrations. Status obscured by resident *deppei*. Many critically determined examples of *caerulea* have been taken from October 1 (Lowery and Dalquest, 1951: 624) to March 29 (G), and from sea level up to 4000 feet (Orizaba; F). Unquestionably occurs far higher, at least on migration. The species was seen near Las Vigas on April 2, 1939. Warner and Mengel (1951: 294) have identified a Boca del Río July 20 "female (?)" as "*caerulea* on the basis of size (wing, 50 mm.) and coloration." In view of the date, the doubtful sexing, the lack of pronounced color differences between *caerulea* and *deppei*, and the more or less intermediate size of their specimen, I consider this identification unsatisfactory.

Eastern Ruby-crowned Kinglet, *Regulus calendula calendula*.—Common winter visitant in highlands up to 10,000 feet, remaining until late April. Unrecorded in Veracruz below, or south of, Córdoba.

American Water Pipit, *Anthus spinoletta rubescens*.—Fairly common winter visitant locally from sea level up to at least 8000 feet. Chapman (1898: 39) saw a few at Las Vigas on April 22 and 25 (latest spring date). P. M. Toro took two (date?) at Orizaba (F), where also obtained by Sumichrast (Baird, 1866: 155). Sallé found it near Córdoba (Sclater, 1856b: 293). Pipits which I felt sure were of this species were closely observed on the beach at Veracruz on February 28 (16) and March 1 (2), and at Isla on March 13 (1). A single pipit, probably of this species, was seen and heard over Las Vigas, April 4.

\*Sprague's Pipit, *Anthus spragueii*.—Status uncertain; one record: a specimen taken by Godman "close to the town of Vera Cruz" (Salvin and Godman, 1889: 236). Quite likely the "*Anthus* . . . ." recorded by Sclater (1856b: 294) from near Córdoba belongs here.

Cedar Waxwing, *Bombycilla cedrorum*.—Common in winter and on migration at medium altitudes (2500 to 5000 feet), comparatively scarce elsewhere, despite the statement of Sumichrast (1869: 548) that it is "found everywhere, and in great abundance in winter." Wetmore (1943), for example, failed to record it near Tres Zapotes. Noted by me at Córdoba: 9 on March 3, 27 on March 5; at Jesús Carranza: 3 on March 7; at Jalapa: 1 on April 13, 15 on April 21, about 75 on April 27, 9 on May 3 and May 6, 2 on May 8 (latest spring record for state).



White-rumped Loggerhead Shrike, *Lanius ludovicianus excubitorides*.—Status obscured by *L. l. mexicanus*, but probably a regular winter visitant in small numbers. Baird (1866: 450) records a February male from Mirador which Ridgway (1904: 246, footnote *d*) assigns to *excubitorides*. In the Museum of Comparative Zoology are two undated specimens from Orizaba (Nos. 31,638 and 31,918) which in coloration of back and forehead seem definitely referable to *excubitorides* though showing approach toward *mexicanus* in greater amount of black on lateral rectrices.

White-eyed Vireo, *Vireo griseus griseus* (includes *noveboracensis*, as I have not attempted to distinguish between these two forms).—Fairly common in winter and on migration in lowlands, sparingly up to about 4500 feet. One from near Potrero, April 19 (C) constitutes latest spring record.

Rio Grande White-eyed Vireo, *Vireo griseus micrus*.—Certainly winters and probably breeds in northern Veracruz. Known from February, March, and early April specimens from Pánuco (H) south to Antigua (March 15; F). On the label of a female he took at Tampico, June 26, 1923, T. S. Gillin wrote "breeding." For the benefit of future collectors I might add that between June 30 and July 14, 1952, I heard songs unmistakably of the White-eyed Vireo type coming from extremely dense thickets at Tamós and south to Poza Rica, Gutiérrez Zamora, and Papantla, the last-named being the type locality of Nelson's unique *Vireo (griseus ?) perquisitor*, taken on March 12, 1898. *V. perquisitor* is darker above and yellower below than *micrus*, differences perhaps correlated with the pronouncedly more humid conditions at Papantla as compared with the haunts of *micrus* in southern Texas and Tamaulipas. Perhaps, on the other hand, *perquisitor* is merely an individual variant, or it may be a valid race breeding to the west of Papantla (see Sutton and Burleigh, 1940b: 230).

\*Eastern Bell's Vireo, *Vireo bellii bellii*.—Perhaps a rare but regular transient and winter visitant, though so far only two records: Presidio, May 6 (Bangs and Peters, 1927: 483), and one I took at Jalapa, May 8, 1939 (D).

\*Yellow-throated Vireo, *Vireo flavifrons*.—Rare but presumably regular in winter and migrations. Known from four localities: Santecomapam, January (Sclater, 1857b: 227), vicinity of Orizaba (Sclater, 1860: 251), Tres Zapotes, February 24 (Wetmore, 1943: 308), and 16 miles south of Boca del Río in April (Davis, 1952b: 324).

Blue-headed Solitary Vireo, *Vireo solitarius solitarius*.—Common in winter and on migration nearly throughout. Dozens of specimens of the nominate race examined from all parts of Veracruz up to above 8000 feet. Winters at least as high as Orizaba, 4000 feet (January 18 and 26; both G). Latest spring specimen of northern race taken April 28 at Las Vigas (F).

Red-eyed Vireo, *Vireo olivaceus*.—Regular and not uncommon transient from sea level up to at least 4500 feet. Spring dates are between April 19 (near Potrero; C) and May 6 (specimen taken by me at Jalapa) and May 11 (seen at Veracruz, 1939). In fall from August 21 (at 4500 feet, east of Teziutlán; Traylor; N).

\*Philadelphia Vireo, *Vireo philadelphicus*.—Probably a rare but regular transient. As yet only one record: two males from Presidio, May 10 (Bangs and Peters, 1927: 483).

\*Western Warbling Vireo, *Vireo gilvus swainsonii*.—Apparently rare but regular in winter and on migration. The three specimens examined—from Orizaba, January 26 (G), Jalapa, April 18 (H), and Presidio, May 4 (F)—are all *swainsonii* as understood in the A. O. U. Check-List (1931: 279). Before Salvin and Godman described the resident form, *amauronotus*, in 1881, *Vireosylva gilva* had been recorded from southern México—probably Córdoba—by Sclater (1856b: 298), from Córdoba by Sanchez (1878: 100), and listed as "found in winter" and "only migratory" (*i.e.*, not breeding) by Sumichrast (1869: 548).

A Warbling Vireo, singing unseen in heavy foliage at Veracruz, May 11, 1939, was presumably a transient, because *amauronotus* is not certainly known from below about 3500 feet.

Black and White Warbler, *Mniotilta varia*.—Winters commonly in suitable areas throughout, from July 25 (seen near La Joya, 1952) to May 15 (Wetmore, 1943: 311).

\*Swainson's Warbler, *Limnothlypis swainsonii*.—Status uncertain, but presumably a rare or casual transient. Two records: a specimen taken near the city of Veracruz, exact date not stated (Salvin and Godman, 1889: 236), and a spring sight record by Davis and Morony (1953a: 353) near San José del Carmen.

\*Worm-eating Warbler, *Helmitheros vermivorus*.—Not rare locally on migration and in winter. "Mountains of Orizaba" (Sumichrast, 1869: 546) and Jalapa (Sclater, 1859a: 363) were the only original Veracruz references until the five late February and March records from near Tres Zapotes, published by Wetmore (1943: 311). Davis and Morony (1953a: 353) have since recorded it near San José del Carmen. It has, however, been taken in southern Tamaulipas in January (Richmond, 1896: 631).

\*Golden-winged Warbler, *Vermivora chrysoptera*.—Rare and little-known, but perhaps a regular transient. Hellmayr (1935: 337) indicates that the missing type of *Sylvicola inornata* Swainson came from near the city of Veracruz. Davis and Morony (1953a: 353) have recently published a spring sight record from near San José del Carmen.

\*\*Blue-winged Warbler, *Vermivora pinus*.—Rare transient, perhaps wintering in lowlands. Except for the old records from Veracruz, Jalapa, and Córdoba cited by Salvin and Godman (1887: 115), it is known only from a male taken March 11 at Tres Zapotes (Wetmore, 1943: 311) and a male taken April 7 at Jalapa (Chapman, 1898: 24).

\*Tennessee Warbler, *Vermivora peregrina*.—Fairly common spring transient, chiefly at medium altitudes; as yet no autumn or winter records. Except for Carriker's April 20 specimen from 5400 feet on Volcán San Martín (Wetmore, 1943: 311), and Davis and Morony's (1953b: 360) April observation near Nanchital, all Veracruz records so far happen to be from Jalapa and vicinity. De Oca (Sclater, 1862b: 29) and Chapman (1898: 24) took it there, the latter on April 18. I saw single birds at Coatepec on April 11, 17, and May 5, and at Jalapa on April 23 and 27.

Eastern Orange-crowned Warbler, *Vermivora celata celata*.—Fairly common winter visitant until early April. Found throughout, from sea level to 8500 feet or higher. One from the Río Pánuco taken in the "winter of 1942" (P) may be referable to *orestera*, as it is somewhat bright for true *celata*.

Eastern Nashville Warbler, *Vermivora ruficapilla ruficapilla*.—Common transient above 2500 feet, apparently scarce near sea level. Doubtless winters, but no January or February specimens seen. A March 6 example of the eastern race was taken by H. O. Wagner "east of Las Vigas" (A), while the latest spring specimen is April 23, Las Vigas (H). Other skins of the nominate race, which I have personally examined, are from Jalapa (April 7, 7, and 18; H) and Río Pánuco (April 4 and 5; P). The species was noted by me at Córdoba: 7 on March 3, 5 on March 5; at Las Vigas: 2 on April 2, 5 on April 8, and 1 on April 9; at Coatepec: 17 on April 11, 14 on April 17; at Jalapa: 1 on April 16, 1 on April 21 (a female of eastern race taken), 11 on April 23, and 2 on April 27.

\*Western Nashville Warbler, *Vermivora ruficapilla ridgwayi*.—Apparently less numerous than last. Specimens examined from Orizaba (2 undated; F), Teocelo (March 6; F), Jalapa (April 15, 15; F); and Pánuco (March 25 and April 20; H).

Northern Parula Warbler, *Parula americana pusilla*.—Uncommon in winter and

on migration from sea level up to at least 4000 feet at Orizaba (Sumichrast, 1869: 546). Specimens of this race (including "*ramalinae*") examined from Paso Nuevo (March 12; F), Tlacotalpam (January 26; H), and Tres Zapotes (see Wetmore, 1943: 311-312). Undoubtedly remains in Veracruz until late April, since Gillin shot one at Tampico on April 25 (P). There is an old record for Jalapa (Sanchez, 1878: 99). The species was noted by me only at Jesús Carranza on March 11 (two) and 12 (one).

Eastern Yellow Warbler, *Dendroica petechia aestiva*.—Presumably regular on migration and perhaps in winter. Since most North American races of the Yellow Warbler are difficult to identify in the plumages usually worn in México, the relative frequency of the various subspecies and possible differences in their season of occurrence are still poorly understood, despite the goodly number of specimens available. The following have been identified as *aestiva*: an Orizaba specimen taken by Mann during the "winter of 1912-1913" (F), a male by me at Córdoba on May 22 (D), and a May 26 male from Boca del Río (Lowery and Dalquest, 1951: 626).

\*Alaska Yellow Warbler, *Dendroica petechia rubiginosa*.—Apparently regular on migration coastwise. Probably occurs inland, and during the winter. Brodkorb (1943: 76) records four from Minatitlán, April 25-30; Wetmore (1943: 312) two from the Tres Zapotes area, April 2 and 6, and one from El Conejo, May 15. I have also examined two January 15 males from Tlacotalpam (H) which seem to belong here.

\*Newfoundland Yellow Warbler, *Dendroica petechia amnicola*.—Apparently regular and fairly common in winter and on migration, chiefly along coastal plain. The following have been identified as *amnicola*: two taken by Brodkorb (1948: 37) on March 12 and 15; single males April 5 and May 3 (Lowery and Dalquest, 1951: 626); two from Minatitlán, April 24 and 28 (Brodkorb, 1943: 76); and the series secured by Wetmore and Carriker between January 17 and April 13 (Wetmore, 1943: 313).

\*Sonora Yellow Warbler, *Dendroica petechia sonora*.—Status uncertain; probably a regular winter visitant in lowlands. Two were taken by Colburn at Tlacotalpam, January 15 and 20, 1901 (H).

Magnolia Warbler, *Dendroica magnolia*.—One of the commonest warblers in winter and on migration up to at least 4500 feet. In 1939, I noted one to eight almost daily from my arrival in late February through May 16, though none was seen above Jalapa. It doubtless reaches Veracruz in late summer, but as yet October 18 (Lowery and Dalquest, 1951: 626) seems to be the earliest fall date.

Eastern Myrtle Warbler, *Dendroica coronata coronata*.—Though few old specimens have been critically re-examined, this is presumably the more numerous race of Myrtle Warbler in Veracruz. The species is decidedly common in winter and on migration from sea level to 9000 feet, remaining until at least April 17 (three seen at Coatepec).

\*Alaska Myrtle Warbler, *Dendroica coronata hooveri*.—Probably regular in winter, though as yet recorded only by Oberholser (1918b: 466) and Wetmore (1943: 313).

\*Pacific Audubon's Warbler, *Dendroica auduboni auduboni*.—Common winter visitant between about 4600 and 12,000 feet. Sumichrast (1869: 547) reported it from Tecamaluca, 1400 meters, but all other records, except Sallé's old specimen supposedly from Orizaba (Sclater, 1860: 250), come from 7000 feet or higher. Chapman (1898: 39) took one at Las Vigas on April 23 (the latest Veracruz spring date). Stone (1890: 216) found it "common in the pine forest of Orizaba at an elevation of 10,000-12,000 ft." above Chalchicomula, just over the state line in Puebla. Taken by H. O. Wagner, March 5, 1949, on north slope of Cofre de Perote (A). Noted by me only near Las Vigas, where common during first third of April (see Sutton and Burleigh, 1940a: 241).

\*Black-throated Gray Warbler, *Dendroica nigrescens*.—Rare or casual in winter in the highlands: Orizaba (see Sumichrast, 1869: 547).

\*Townsend's Warbler, *Dendroica townsendi*.—Regular winter visitant in small numbers between elevations of about 8000 and 10,000 feet. Unrecorded until April 4, 1939, when I saw three males at about 10,000 feet, near Las Vigas, and secured one (Sutton and Burleigh, 1940a: 241). On April 8 one was noted just below Las Vigas. Traylor collected a male at 8500 feet near Perote on September 6, 1948 (N).

Northern Black-throated Green Warbler, *Dendroica virens virens*.—Common transient at medium altitudes (2500–5000 feet), less numerous higher and lower. Winters regularly up to at least 4000 feet. Extreme dates are September 2 (young male taken by Traylor at Perote; N) and May 11 (seen by me at city of Veracruz).

\*Hermit Warbler, *Dendroica occidentalis*.—Common between 7000 and 10,000 feet from September 2 (Traylor near Perote; N) until latter half of April (taken by C. B. Isham at Las Vigas). Sutton and Burleigh (1940a: 241) found it common at Las Vigas in early April, where I noted between three and eight daily. Lowery and Dalquest (1951: 627) record two from Las Vigas, November 4 and April 2. Sumichrast (1869: 546) listed it for Moyoapam at 2500 meters, and Botteri took one supposedly at Orizaba, but very likely well above that town (G).

\*Cerulean Warbler, *Dendroica cerulea*.—Probably a rare or casual transient; two records: a male secured by me in deep woods near Jalapa, April 25, 1939 (D), and one or more seen by Davis and Morony (1953a: 353) near San José del Carmen.

\*\*Blackburnian Warbler, *Dendroica fusca*.—Apparently a rather rare transient; may winter occasionally. Salvin and Godman (1887: 134) cite "Vera Cruz." De Oca took it near Jalapa (Sclater, 1859a: 363). Sumichrast (1869: 547) considered it "very rare" at Orizaba, whence comes the only Veracruz specimen I have seen: an adult male taken by Mann during the "winter of 1912-1913" (F). In 1939 I saw two separate males at Coatepec on May 5, and one female at Veracruz on May 11. Davis and Morony (1953a: 353) record it from near San José del Carmen.

Sycamore Yellow-throated Warbler, *Dendroica dominica albiflora*.—Regular but uncommon on migration and in winter up to at least 4500 feet, August 10 (Sumichrast, 1869: 547) to March 25 (Wetmore, 1943: 314).

\*Northern Grace's Warbler, *Dendroica graciae graciae*.—May winter regularly in highlands, but as yet only one or two records: a Las Vigas male taken by Sutton on April 2, definitely of the nominate race (Sutton and Burleigh, 1940a: 241), and an undated mounted male specimen from Jalapa, labelled "*Dendroica graciae decora*" (L). In the absence of comparative material I was unable to determine whether the latter represents the first Veracruz record of *decora* or is merely a misidentified example of the typical race.

\*Chestnut-sided Warbler, *Dendroica pensylvanica*.—Apparently a rather rare transient, long known from Jalapa (Sclater, 1859a: 363) and Playa Vicente (Sclater, 1859b: 374). Dalquest took a male near Jesús Carranza on May 4 (Lowery and Dalquest, 1951: 627), and I have seen two undated adult males in spring plumage from Jalapa (L). Well-colored males were observed at Coatepec on May 5 (two) and at Jalapa on May 6 (one). Davis and Morony (1953a: 353 and 1953b: 360) saw the species near San José del Carmen and Nanchital.

Eastern Oven-bird, *Seiurus aurocapillus aurocapillus*.—Uncommon in migrations and winter from sea level up to 4500 feet or more. Specimens of nominate race examined from Orizaba (two without data; F), near Potrero (April 13; C), and, as recorded by Wetmore (1943: 314), from Tres Zapotes and El Conejo. Lowery and Dalquest (1951: 627) list a female taken on October 17 at Jalapa and another speci-

men taken March 30 at Jesús Carranza. Chapman (1898: 24) took a male (race?) at Jalapa on April 6. This easily overlooked species was noted by me only at Jesús Carranza on March 15 (two, separately) and at Jalapa on April 21 (two).

Common Northern Water-Thrush, *Seiurus noveboracensis noveboracensis*.—Status obscured by next race, but almost surely rather common on migration from sea level up to at least 8000 feet. Winter specimens not available, but this may be of no significance. Critically determined examples include an April 26 female from Las Vigas (Chapman, 1898: 40), an undated specimen from Orizaba (F), and an April 20 female from near Potrero (C). The species (race?) was noted by me only twice: at Jalapa on May 6 and at Veracruz on May 10.

Grinnell's Northern Water-Thrush, *Seiurus noveboracensis notabilis*.—Status obscured by preceding race, but apparently locally common in winter and on migration in the lowlands, and not rare during migrations at higher elevations. Sub-specifically determined examples include a January 29 female from Tlacotalpam (H), a May 21 female from Presidio (Bangs and Peters, 1927: 484), and the five recorded by Wetmore (1943: 314), February 6 to April 13.

Louisiana Water-Thrush, *Seiurus motacilla*.—Fairly common locally on migration and in winter from sea level up to about 8000 feet. One or two noted by me on July 29, 31, and August 1 at Jalapa; August 13 at Orizaba; August 24 and 27 at Jesús Carranza; August 26 at Puerto México; August 30 at Atoyac; March 4 at Motzorong; March 13 at Isla; March 19 at Jesús Carranza. Latest spring date for southern Veracruz is March 25 (Wetmore, 1943: 314), for northern, April 1 at Pueblo Viejo (N) and April 2 at Río Pánuco (P). Winter or very early spring dates are February 26 at Ahotal (N) and February 24 near Potrero Viejo (Lowery and Dalquest, 1951: 627). Earliest fall specimens: "August" (Ferrari-Perez, 1886: 136), and August 29 at 4500–5000 feet, east of Teziutlán (N); but from just outside of Veracruz, at 8000 feet near Alchichica, Puebla, there is a July 26 skin (T).

\*Kentucky Warbler, *Oporornis formosus*.—Fairly common locally in winter and on migration in southern lowlands. One old record for Playa Vicente (Sclater, 1862a: 19) was the only evidence of its occurrence in Veracruz until the work of Wetmore and Carriker, who took specimens on seven dates between January 19 and April 8 (Wetmore, 1943: 314–315). More recently, Dalquest shot a male near Jesús Carranza on March 30, 1949 (Lowery and Dalquest, 1951: 627), and Davis and Morony (1953a: 353) saw the species near San José del Carmen.

\*Mourning Warbler, *Oporornis philadelphia*.—Fairly common transient in May, chiefly along coastal plain. Unrecorded in southward flight, but probably regular in late summer (eleven August and September Tamaulipas specimens recorded by Phillips, 1911: 86). Sanchez (1878: 99) listed *Geothlypis philadelphia* from Orizaba, presumably based on Sclater (1862b: 27), whose reference is referred by Ridgway (1902: 634) to *O. tolmiei*.

On May 10, 1939, in thickets just back of the dunes at Veracruz I secured a male Mourning Warbler (D) and saw near it at least five others of both sexes. Two days later I saw another male at Alvarado.

In 1942, the U. S. National Museum received from A. E. Colburn a male taken by P. W. Shufeldt in "Vera Cruz" on an unknown date (see Wetmore, 1943: 315). From what Mr. Shufeldt once wrote me about his Mexican fieldwork, the place of capture was probably La Buena Ventura or nearby Buena Vista. This may well be the "Veracruz—Buena Vista, May 13" occurrence listed by Bent (1953: 532), which, incidentally, seems to be the first Mexican specimen of the Mourning Warbler, because it must date back to 1901, the only year Colburn and Shufeldt (who are responsible for all Buena Vista, Veracruz, bird records) collected there.

In 1940 Carriker took three males between May 5 and 10 near Tres Zapotes and low on Cerro de Tuxtla, as recorded by Wetmore (*loc. cit.*). Brodkorb (1943: 77) reports a May 22 specimen from Tabasco.

MacGillivray's Warbler, *Oporornis tolmiei* (subsp?).—Uncommon transient from sea level to 9000 feet or more. To be looked for in winter. Noted by me at Jalapa on April 21 (one male) and at Veracruz on May 10 (two males associating with Mourning Warblers in thickets near the beach). Sutton and Burleigh (1940a: 241) report three on April 4 at 8000 to 9000 feet near Las Vigas, where Chapman (1898: 40) took two males, one of them on April 21 (H). Earliest fall date on hand is September 5 at Perote (N). Because of lack of comparative material and slight racial differences, I have not attempted subspecific identification of the few Veracruz skins examined. Nevertheless, Lowery and Dalquest (1951: 627) have provisionally allocated to *austinsmithi* a Jalapa male taken on the late date of May 29.

Northern Yellowthroat, *Geothlypis trichas brachidactyla*.—Presumably regular in winter and fairly common from sea level up to at least 4000 feet. Specimens identified as *brachidactyla* include the four reported by Wetmore (1943: 315), also one from Teocelo, March 2 (F), and one I took at Veracruz on May 10 (D). I found the species much less common than expected, never seeing more than three in a day.

Maryland Yellowthroat, *Geothlypis trichas trichas*.—Apparently quite regular in winter, remaining at least until mid-April. Specimens identified as *trichas* include the four recorded by Wetmore (1943: 315), also birds from Papantla, March 7 (G), Fortín, March 23 (Lowery and Dalquest, 1951: 628), and Rivera, April 18 (G).

\*Athens Yellowthroat, *Geothlypis trichas typhicola*.—Probably regular in winter, but so far the only satisfactory records known to me are the four specimens from Tres Zapotes, January 18 to March 5, reported by Wetmore (1943: 315), and the May 26 male from Boca del Río recorded by Lowery and Dalquest (1951: 628).

\*Western Yellowthroat, *Geothlypis trichas occidentalis*.—Status uncertain; two records: Lowery and Dalquest (1951: 628) have assigned to this race March 23 and May 3 specimens, both shot near Jesús Carranza.

Eastern Yellow-breasted Chat, *Icteria virens virens*.—Common in winter and on migration in lowlands, less numerous up to 4500 feet or more, where it is probably chiefly a transient, remaining until at least May 7. That it winters even in extreme northern Veracruz is indicated by a February 19 specimen from Río Pánuco (P).

\*Long-tailed Yellow-breasted Chat, *Icteria virens auricollis*.—The only Veracruz records for this race are those of Lowery and Dalquest (1951: 629), some of which were admittedly doubtful. I have generously been given access to these specimens and would confidently refer to *auricollis* only one of them: Kansas University Museum of Zoology No. 23,926, from near Potrero, February 16. This is a male (wing measuring 78 mm., tail 81) with deep yellow underparts, but whose color above appears closer to that of eastern birds, though strictly comparable material was not available.

\*Hooded Warbler, *Wilsonia citrina*.—Fairly common locally in winter and on migration from sea level to 4000 feet at Orizaba (three undated males; F and L; also see Sumichrast, 1869: 547). Taken by Sallé at Córdoba (Sclater, 1856b: 291). Near Tres Zapotes, Wetmore and Carriker found it "not uncommon" and took specimens between January 19 and March 30 (Wetmore, 1943: 317). There are three records from Motzorongo: September, 1931 (L), March 24, 1932 (L), and December 9, 1946 (Lowery and Dalquest, 1951: 629). I observed it only twice, single adult males on August 23 and March 10, both at Jesús Carranza. Irby Davis (1952a: 315) saw one or more near Catemaco in April.

Wilson's Pileolated Warbler, *Wilsonia pusilla pusilla*.—The species is decidedly common in winter and on migration virtually throughout the state. I saw from several to 24 nearly every day from my arrival in late February until May 10. They seemed about equally common at all elevations up to 8000 feet or more. The species arrives in early September (see under *W. pusilla pileolata*). The nominate race is probably less common than *pileolata* in Veracruz. Wetmore (1943: 317) records two March examples of *pusilla* from Tres Zapotes and another from the summit of Volcán San Martín, April 22. Lowery and Dalquest (1951: 629) list three skins of *pusilla* taken between September 30 and March 26. I have also examined two undated Orizaba specimens (F), a February 7 female from Motzorongó (F), and two from Río Pánuco (P).

Northern Pileolated Warbler, *Wilsonia pusilla pileolata*.—Probably most of the very numerous Pileolated Warblers in Veracruz belong to this race. Specimens examined from all parts of the state from as early as September 6 (taken by Traylor at Perote; N) until April 20 (shot by Lea near Potrero; C).

\*Golden Pileolated Warbler, *Wilsonia pusilla chryseola*.—Little known but perhaps regular in winter. The only records are the two March specimens from Tres Zapotes reported by Wetmore (1943: 317). I believe I have seen no equally bright ones from Veracruz.

Canada Warbler, *Wilsonia canadensis*.—Uncommon transient from sea level to about 8000 feet (two from Las Vigas, undated; L). Lowery and Dalquest (1951: 630) furnish both the earliest (March 8) and latest (May 28) spring records for Veracruz. Noted by me at Jalapa on April 21 and May 8, at Xico on May 7 (three), at Veracruz on May 10 (three), and at Alvarado on May 12. Unrecorded as yet in fall, but presumably regular in August and September.

American Redstart, *Setophaga ruticilla*.—The species winters commonly in the lowlands and is fairly numerous up to about 4000 feet during migration, but is apparently scarce above that elevation. Remains until at least May 10 (one seen at Veracruz, 1939). Midwinter specimens include a January 20 male from near Jesús Carranza (E) and a January 27 skin from Tres Zapotes (Wetmore, 1943: 318). I have not yet had an opportunity to determine Veracruz specimens subspecifically, but Wetmore (1949: 139) has recently recorded *S. r. tricolora* from Tres Zapotes, and assigned to that race a March 8 female from Potrero (Lowery and Dalquest, 1951: 630).

\*Western Meadowlark, *Sturnella neglecta*.—Added to the state list by Dr. George B. Saunders, who kindly informs me (*in litt.*): "A scarce winter visitant in northern Veracruz. A male (G. S. No. 2523) was collected November 30, 1949, west of Tampico near Cacalilao, Veracruz, and a female January 14, 1952, two miles west of Tamós. The male was taken from a small flock, but the female was alone. Both gave typical *neglecta* call notes."

Orchard Oriole, *Icterus spurius*.—Regular and locally common in winter in lowlands of southern Veracruz. As a transient, abundant on coastal plain, common up to 4500 feet, rare at 8200 feet, just outside of Veracruz near Chalchicomula, Puebla (Stone, 1890: 214). No evidence whatever of breeding, though present from July 14 (when I found them becoming common near Tecolutla in small flocks which included adult males) and July 16 (Warner and Mengel, 1951: 294) until May 15 (Lowery and Dalquest, 1951: 633) or later (a May 30 specimen from Chiapas seen; A). By mid-May—my last were at Córdoba, May 15—a few males are in full song, but these individuals, like those in mid-July, are restless and quite evidently migrating. I found the Orchard Oriole to be one of the very commonest migratory

birds at lower altitudes, perhaps most numerous in August and March. At Jesús Carranza flocks of 50 to 80 often came to roost at night in cattails (*Typha*), much after the manner of Redwings (*Agelaius*).

\*Audubon's Black-headed Oriole, *Icterus graduacauda audubonii*.—Status uncertain; perhaps regular in winter, at least in extreme north. U. S. National Museum No. 76,799, taken by de Oca at Jalapa, has been identified by Ridgway as *audubonii* (G). Hellmayr (1937: 144) lists three from Tampico, presumably taken just north of the Veracruz line.

Baltimore Oriole, *Icterus galbula*.—Rather uncommon in winter and on migration at low and medium altitudes, August 23 (taken by Traylor at about 4500 feet, highest Veracruz record, east of Teziutlán; N) to May 13 (Mirador; G). One or two noted by me as follows: at Córdoba on March 3 and 5, at Jesús Carranza on March 11 and 18 (male taken), and at Coatepec on April 11.

\*Common Bullock's Oriole, *Icterus bullockii bullockii*.—Probably a rare winter visitant in mountains; as yet only two records: a male shot by Sutton at about 8200 feet near Las Vigas on April 2 (Sutton and Burleigh, 1940a: 242), and an adult male clearly seen by me at Coatepec, April 11, 1939.

\*Brewer's Blackbird, *Euphagus cyanocephalus*.—Regular winter visitant in highlands down to about 4000 feet. Sumichrast (1869: 553) recorded it from the valley of Orizaba. P. M. Toro long ago shot two at or near the city of Orizaba (F). Chapman (1898: 42) saw "several flocks" at Las Vigas in late April and collected a pair, while Isham secured a male there on April 20 (F). Sutton and Burleigh (1940a: 242) saw "a small flock a mile west of Las Vigas on . . . April 5."

\*Eastern Brown-headed Cowbird, *Molothrus ater ater*.—Perhaps only casual in winter. The only satisfactory record known to me is the February 16 female from Tlacotalpam recorded by Wetmore (1943: 321).

Nevada Brown-headed Cowbird, *Molothrus ater artemisiae*.—Status obscured by resident form, but probably regular in winter until May 14 (a male measuring wing 111 mm., tail 75, culmen from base 17.1, taken by me at Córdoba).

\*Western Tanager, *Piranga ludoviciana*.—Apparently rare but regular winter visitant in mountains down to an elevation of about 4000 feet. Sclater (1856a: 125) reported this species from Orizaba, and Sumichrast (1869: 550) from the state of Veracruz in winter. I have examined a male and female taken at or near Orizaba (F), also two females from Jalapa (F). These records, all old and undated, appear to be the only ones for Veracruz. However, at Altamira, near sea level in extreme southern Tamaulipas, Armstrong collected "numerous specimens (January and February)," as reported by Richmond (1896: 631). Presumably, therefore, this species will be found to winter regularly in the northern Veracruz lowlands.

Eastern Summer Tanager, *Piranga rubra rubra*.—Not uncommon on migration from sea level up to 8000 feet or more (Las Vigas, April 25; F). Winters regularly, but perhaps rarely, at low altitudes: Jaltipán, February 2 (G) and Motzorongo, February 25 (G). Extreme dates are August 26 (at about 4500 feet, east of Teziutlán; N) and May 6 (see below). The species was noted by me at Motzorongo: 3 on March 4; at Isla: 1 on March 13; at Jalapa: 1 on April 18 (a molting male, collected) and one fully red male seen on May 6. The many Veracruz skins examined all belong to the nominate race.

Rose-breasted Grosbeak, *Pheucticus ludovicianus*.—Uncommon to rare in winter, but fairly common locally in migrations, from sea level up to 4500 feet or more. Remains until at least April 18.

\*Eastern Blue Grosbeak, *Guiraca caerulea caerulea*.—Status obscured by other



forms, but probably winters regularly in small numbers. Dwight and Griscom (1927: 4) include Veracruz in the winter range of *caerulea*. Critically determined specimens examined by me are a November 29, 1868, bird from Orizaba (identified as *caerulea* by Oberholser in 1936; G), a March 7 male (wing 87 mm., tail 68, bill 17) taken at Coscomatepec (H), a March 31 male (wing 89, tail 70.5, bill 17, both wing-bars dark) from Jalapa (H), and an April 13 male (wing 90, tail 68, bill 17.5) from Jalapa (H). The last was originally recorded by Chapman (1898: 28) as *eurhyncha*.

Arizona Blue Grosbeak, *Guiraca caerulea interfusa*.—Status obscured by other forms, but probably a regular winter visitant in moderate numbers. Due to long-existing confusion between this form and the breeding *eurhyncha*, satisfactorily determined examples of *interfusa* from Veracruz are few. Wetmore (1943: 333) records a male from Tres Zapotes, March 21, and there is an undated Orizaba male in Washington (U. S. National Museum No. 38,174) identified as *interfusa* by Oberholser in 1936.

Indigo Bunting, *Passerina cyanea*.—Regular but local and uncommon during winter along coastal plain, locally common during migrations from sea level up to about 4000 feet (undated Orizaba specimens; F; G). I saw it only at Motzorongo (three on March 4) and Jesús Carranza (two on March 11), but Dalquest found it "common in open fields in spring, usually in flocks of ten to fifty individuals" (Lowery and Dalquest, 1951: 639). Probably winters in extreme northern Veracruz, as I have seen a February 21 skin from Pánuco (H), whence comes the latest spring record, May 15 (H).

Eastern Painted Bunting, *Passerina ciris ciris*.—Status uncertain. Presumably rare or casual. Recorded from Tres Zapotes by Wetmore (1943: 334), and from near Potrero and El Faro by Lowery and Dalquest (1951: 640). Storer (1951: 10) has recently shown that the following form accounts for virtually all of the wintering Painted Buntings of México (exclusive of Yucatán).

Western Painted Bunting, *Passerina ciris pallidior*.—See preceding form. Winters regularly in lowlands and sparingly up to 2000 feet or more. Possibly breeds, though the adult male (testes somewhat enlarged) taken near Boca del Río, July 20 (Warner and Mengel, 1951: 295) may have been a post-breeding migrant. Specimens of *pallidior* are numerous, and show that this form is widespread, reaching at least 4000 feet during migration, and remaining in spring until at least April 28.

Dickcissel, *Spiza americana*.—Regular, not uncommon, early fall and late spring transient along coastal plain, more rarely inland as high as 8000 feet (Las Vigas; L). Though Sumichrast (1869: 552) thought it wintered, all dated records indicate that it is just a transient. Arrives in fall by August 23, when I saw a male and shot a female at Jesús Carranza. My only others were seen in May: a male at Veracruz on the 11th, and a flock of twelve at Presidio on the 18th. This is latest spring record for Veracruz, although Godman took a male at Jalapa in May, 1888 (exact date not on label; N). Other specimens examined from near Tampico, August 25 (P), Mirador, no date (G), Rivera, April 22 (G), and Minatitlán, April 24 (A).

\*Cassin's Finch, *Carpodacus cassinii*.—Status uncertain; presumably a rare or casual winter visitant to west-central highlands. Apparently all Veracruz references to this species originate from a Sartorius-taken male whose label, reading "pine forests above Mirador . . . June 1864" (G), may be misdated.

\*Eastern American Goldfinch, *Spinus tristis tristis*.—Probably rare or casual in winter; one record: American Museum of Natural History No. 230,412, a male (wing 71 mm., tail 45) taken at Pánuco on February 20, 1923, by W. W. Brown, Jr. In color and markings this individual seems definitely referable to the eastern

race, here reported for the first time so far south, though Sutton and Burleigh (1939: 44) have recorded this race from near Monterrey, Nuevo León.

\*Pale American Goldfinch, *Spinus tristis pallidus*.—Probably rare but regular in winter south to central Veracruz. I have seen a March 6 female from Teocelo (F), and two from Pánuco (both H): a March 8 male (wing 77 mm., tail 49) and a March 5 female (wing 72, tail 46). Jalapa skins of this species listed by Sharpe (1888: 195) are assigned to *pallidus* by Hellmayr (1938: 296).

\*Eastern Savannah Sparrow, *Passerculus sandwichensis savanna*.—Probably regular and locally common in winter, though so far known only from Carriker's three February specimens from Tlacotalpam and El Conejo (Wetmore, 1943: 338), and from a November 14 female taken near Tehuatlán (Lowery and Dalquest, 1951: 644). The species (race?) was noted by me at Veracruz on February 28 (three) and May 10, and at Isla on March 13 and 14 (about twenty).

The few old Veracruz specimens of *P. sandwichensis* need to be re-examined.

\*Nevada Savannah Sparrow, *Passerculus sandwichensis nevadensis*.—Status uncertain; probably winters regularly in mountains. Four males collected by me in grassy fields just east of Perote, May 25 and 26, 1939 (D), had greatly enlarged testes, were singing freely and chasing one another. Their activity and the late date led me to suppose they were preparing to nest there. Messrs. Peters and Griscom, however, kindly examined the quartet and pronounced them all "ultratypical of *nevadensis*," and therefore presumably just belated migrants.

\*Eastern Grasshopper Sparrow, *Ammodramus savannarum pratensis*.—Rare or perhaps only casual in winter; one record: El Conejo, February 12 (Wetmore, 1943: 338). This female (U. S. National Museum No. 360,472) measuring, wing 61 mm., tail 44.5, does not seem to me dark enough above for typical *pratensis*, though I list it as such on Dr. Wetmore's authority.

Western Grasshopper Sparrow, *Ammodramus savannarum perpallidus*.—Status obscured by presence of *pratensis* and of the resident *bimaculatus*, but apparently a regular winter visitant in lowlands, and sparingly up to 3500 feet. Critically determined specimens examined from Mirador, December 8 (Lowery and Dalquest, 1951: 644); Pánuco, February 11 and 14 (both H); Tejería, March 9 (A); city of Veracruz, March 11 (A); and Minatitlán, April 24 (A). The last three have been recorded by Brodkorb (1948: 38, and 1943: 87).

\*\*Western Vesper Sparrow, *Pooecetes gramineus confinis*.—Seemingly rare in winter, western Veracruz only. Salvin and Godman (1887: 383) state that de Oca and Höge found the Vesper Sparrow at Jalapa, and I have seen an undated male *confinis* from Orizaba (F). The only recent records are a male (race?) and a female of *confinis* from near Zacualpilla, November 9, 1949 (Lowery and Dalquest, 1951: 644).

\*Western Lark Sparrow, *Chondestes grammacus strigatus*.—Uncommon winter visitant from sea level up to at least 4500 feet. At El Conejo Carriker shot two from a small flock on February 10 (Wetmore, 1943: 338). C. B. Worth took a male of *strigatus* at Río Pánuco, March 28 (P). Sumichrast (1869: 552) included this species among the migrants wintering in Veracruz. Sometime between March 28 and April 16, 1897, Chapman (1898: 29) observed one near Jalapa, where on April 21, 1939, I saw a flock of twelve (race?).

\*\*Rock Rufous-crowned Sparrow, *Aimophila ruficeps eremoeca*.—Status obscured by resident *boucardi*, but *eremoeca* perhaps winters regularly in mountains near Puebla border. As yet, known only from the March specimen from Maltrata mentioned by Ridgway (1901: 251).

Western Chipping Sparrow, *Spizella passerina arizonae*.—Doubtless regular and fairly common in winter down to about 4500 feet elevation, though as yet dated specimens taken only in April. Chapman's three from Jalapa, April 5–6 (H), his April 22 male from Las Vigas (H), Isham's April 25 female from Las Vigas (F), and my April 8 female from Las Vigas (D) all are *arizonae*.

\*Clay-colored Sparrow, *Spizella pallida*.—One record: a male shot near Tierra Colorada, March 14, 1941, by I. J. Cantrall (A), and recorded by Brodtkorb (1948: 38). Probably regular in winter, however, because just outside of Veracruz it has been taken at Tampico (four, March 29 to 31, 1923; P) and at Chalchicomula (Ridgway, 1901: 325).

\*Worthen's Sparrow, *Spizella wortheni*.—One record: a single individual (R) collected by Dalquest two kilometers west of Limón, 7500 feet, September 24, 1948 (Lowery and Dalquest, 1951: 645). Perhaps of regular occurrence, however, since Chalchicomula, just over the line in Puebla, is listed for this little-known sparrow by Ridgway (1901: 322).

Northern Lincoln's Sparrow, *Melospiza lincolni lincolni*.—The species is very common in winter throughout Veracruz from sea level to 10,000 feet elevation or higher. I noted it in numbers at almost every place visited during winter and spring until May 12 at Alvarado. Veracruz specimens identified since the description of *alticola* in 1935 are mostly of the nominate race.

Montane Lincoln's Sparrow, *Melospiza lincolni alticola*.—Status obscured by preceding form. Referable to *alticola* are a male from Minatitlán, April 23 (Brodtkorb, 1943: 88), and three females discussed by Wetmore (1943: 340) from Tres Zapotes, March 18 and April 13, and Tlacotalpam, February 5.

\*Chestnut-collared Longspur, *Calcarius ornatus*.—Rare or casual winter visitant in mountains; no recent records. Long ago Sclater (1860: 251) recorded two specimens from near Orizaba, the city to which Sumichrast (1869: 551) wrote that it descended rarely from the "great plains of the plateau"—presumably in the state of Puebla.

#### HYPOTHETICAL LIST

American Long-eared Owl, *Asio otus wilsonianus*.—The "*Asio americanus*" recorded by Sumichrast (1881: 237) from Orizaba may or may not be this species.

White-throated Swift, *Aëronautes saxatalis* (subsp.).—Sumichrast (1869: 562) wrote: "I think that I have recognized the *Panyptila melanoleuca* in a species from the mountains of Orizaba."

Lesser Cliff Swallow, *Petrochelidon pyrrhonota tachina*.—See *Petrochelidon* (species?) in foregoing list.

Western Robin, *Turdus migratorius propinquus*.—All alleged Veracruz records for this form appear referable to *T. m. phillipsi*.

Willow Veery, *Hylocichla fuscescens salicicola*.—Sumichrast (1869: 543–544) wrote: "A small *Hylocichla* . . . seems to me to have presented all the characteristics of the *T. fuscescens*, as given in Prof. Baird's 'Birds of North America'." Ridgway (1907: 68), not having seen Sumichrast's specimen, referred it with a question mark to *salicicola*. Recently Blake (1953: 429), in his excellent field-guide, followed Ridgway, though omitting the question-mark.

Golden-cheeked Warbler, *Dendroica chrysoparia*.—Bent (1953: 321) records this species from "Teziutlán, western Veracruz," but this should read Teziutlán, Puebla. The source of this record is presumably the December female taken by Ferrari-Perez (1886: 137).

Scott's Oriole, *Icterus parisorum*.—The numerous Veracruz references to this

species in the literature appear to be based solely on the following statement of Sumichrast (1869: 553): "occurs chiefly in the temperate parts, where it breeds, but is not exclusively confined there, for it is found in the alpine region to the height of at least 1600 metres, near Orizaba, and on the plateau at even a higher elevation." Inasmuch as all recent collectors, so far as I know, have failed to find *parisorum* in Veracruz, Sumichrast must have confused it with one of the many other Mexican orioles, most likely with the similar highland species, *I. wagleri*, which in turn Sumichrast (*op. cit.*) evidently mistook for the very closely related lowland form, *I. prosthemelas*. Pending further evidence, therefore, Scott's Oriole should no longer be credited to Veracruz.

### SUMMARY

At least 211 species and 32 additional subspecies of North American birds have been found in the state of Veracruz, México, as non-breeders. Arranged, in so far as possible, by where they nest, they fall into the following categories:

1. Breed chiefly or exclusively in temperate latitudes	
a. Breed chiefly or exclusively east of 100th meridian	91
b. Breed chiefly or exclusively west of 100th meridian	78
c. Breeding range continent-wide, or nearly so	40
2. Breed chiefly or exclusively in arctic North America	29
3. Not classifiable as above	5
	—
Total forms	243

The present status in Veracruz of each migrant is briefly outlined, including altitudinal preferences and seasons of occurrence, when known. Though the great majority is represented by Veracruz specimens, a large percentage of which the writer has checked, the following species are included on the basis of sight records only: Lesser Snow Goose (*Chen hyperborea*), Blue Goose (*Chen caerulescens*), Swallow-tailed Kite (*Elanoides forficatus*), Bald Eagle (*Haliaeetus leucocephalus*), Prairie Falcon (*Falco mexicanus*), Common Gallinule (*Gallinula chloropus*), Semipalmated Ringed Plover (*Charadrius hiaticula semipalmatus*), Ruddy Turnstone (*Arenaria interpres*), White-rumped Sandpiper (*Erolia fuscicollis*), Stilt Sandpiper (*Micropalama himantopus*), Ring-billed Gull (*Larus delawarensis*), Bonaparte's Gull (*Larus philadelphia*), Caspian Tern (*Hydroprogne caspia*), and Bank Swallow (*Riparia riparia*). Wilson's Petrel (*Oceanites oceanicus*), Gannet (*Morus bassanus*), and Golden-winged Warbler (*Vermivora chrysoptera*) may also belong in the sight-record-only category.

While in Veracruz, land birds from western North America apparently prefer the west-central highlands near the Puebla state line.

Thus, twenty western migrants as against only two eastern are known in Veracruz solely from this area.

In the spring, passerines bound for western North America seldom remain in Veracruz until May and as a rule are not appreciably commoner in April than in winter. On the other hand, land birds going to eastern North America, many of which are only transients in Veracruz, nearly all postpone their departure until May 1 to 15, or even later. Moreover, in many cases they are noticeably commoner during the first third of May than in April.

The first southbound land birds, which with a very few exceptions are from eastern North America, appear in mid- or late July. Western land birds apparently do not arrive, at least in any numbers, before early September. Numerous water birds not known to nest south of the northern United States or Canada may be found in Veracruz at practically any season.

Generally speaking, migrants are very numerous not only along the Veracruz coast, but sixty miles inland along the eastern slopes of the Sierra Madre Oriental.

It is believed that the following twenty-two forms are here recorded from Veracruz in print for the first time: Richardson's Goose (*Branta h. hutchinsii*), American Widgeon (*Mareca americana*), Redhead (*Aythya americana*), Bald Eagle (*Haliaeetus leucocephalus*), Prairie Falcon (*Falco mexicanus*), Florida Common Gallinule (*Gallinula chloropus cachinnans*), Semipalmated Ringed Plover (*Charadrius hiaticula semipalmatus*), American Ruddy Turnstone (*Arenaria interpres morinella*), Hudsonian Whimbrel (*Numenius phaeopus hudsonicus*), White-rumped Sandpiper (*Erolia fuscicollis*), Stilt Sandpiper (*Micro-palama himantopus*), Semipalmated Sandpiper (*Ereunetes pusillus*), Northern Black Skimmer (*Rynchops n. nigra*), Howell's Common Nighthawk (*Chordeiles minor howelli*), Acadian Flycatcher (*Empidonax virescens*), Common Bank Swallow (*Riparia r. riparia*), Desert Rough-winged Swallow (*Stelgidopteryx ruficollis psammochrous*), Western Nashville Warbler (*Vermivora ruficapilla ridgwayi*), Sonora Yellow Warbler (*Dendroica petechia sonorana*), Western Meadowlark (*Sturnella neglecta*), Eastern American Goldfinch (*Spinus tristis tristis*), and Nevada Savannah Sparrow (*Passerculus sandwichensis nevadensis*).

Evidence is presented why Veracruz should be excluded from the breeding ranges of the Lesser Cliff Swallow (*Petrochelidon pyrrhonota tachina*), Northern Purple Martin (*Progne s. subis*), and Scott's Oriole (*Icterus parisorum*).

## LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1931. Check-List of North American birds. 4th edition. (Amer. Ornith. Union, Lancaster, Pa.), xx + 526 pp.
- BAIRD, S. F. 1866. Review of American Birds in the Museum of the Smithsonian Institution. *Smithson. Misc. Coll.*, 181: vi + 478 pp.
- BANGS, O., and J. L. PETERS. 1927. Birds from the Rain Forest Region of Vera Cruz. *Bull. Mus. Comp. Zool.*, **67**: 471-487.
- BEEBE, C. W. 1905. Two Bird-Lovers in Mexico. (Houghton Mifflin, Cambridge), xii + 408 pp.
- BENT, A. C. 1922. Life histories of North American petrels and pelicans and their allies. *Bull. U. S. Natl. Mus.*, 121: xii + 343 pp.
- BENT, A. C. 1949. Life histories of North American thrushes, kinglets, and their allies. *Bull. U. S. Natl. Mus.*, 196: viii + 454 pp.
- BENT, A. C. 1953. Life histories of North American wood warblers. *Bull. U. S. Natl. Mus.*, 203: xii + 734 pp.
- BLAKE, E. R. 1953. Birds of Mexico. (Univ. Chicago Press), xxx + 644 pp.
- BRODKORB, P. 1943. Birds from the Gulf lowlands of southern Mexico. *Misc. Publ. Mus. Zool., Univ. Mich.*, 55: 1-88.
- BRODKORB, P. 1948. Some birds from the lowlands of central Veracruz, Mexico. *Quart. Journ. Florida Acad. Sci.*, **10**: 31-38.
- CAMPBELL, L. W. 1940. Birds of Lucas County [Ohio]. *Bull. Toledo Mus. Sci.*, 1: 1-225.
- CHAPMAN, F. M. 1898. Notes on birds observed at Jalapa and Las Vigas, Vera Cruz, Mexico. *Bull. Amer. Mus. Nat. Hist.*, **10**: 15-43.
- CHAPMAN, F. M. 1914. A Naturalist's Journey Around Vera Cruz and Tampico. *Natl. Geogr. Mag.*, **25** (5): 532-562.
- CHAPMAN, F. M. 1930. Handbook of Birds of eastern North America. Rev. ed. (D. Appleton, New York), xxx + 530 pp.
- COOKE, M. T. 1940. Winter range of the Herring Gull. *Auk*, **57**: 250-251.
- COOKE, M. T. 1946. The winter range of the Great Blue Heron. *Auk*, **63**: 254.
- DAVIS, L. I. 1952a. Breeding-bird census from tropical woods 7 mi. south of Catemaco, Veracruz. *Aud. Field Notes*, **6**: 314-315.
- DAVIS, L. I. 1952b. Breeding-bird census from coastal prairie 16 mi. south of Boca del Río, Veracruz. *Aud. Field Notes*, **6**: 324.
- DAVIS, L. I., and J. MORONY, JR. 1953a. Lowland tropical forest. *Audubon Field Notes*, **7**: 352-353.
- DAVIS, L. I., and J. MORONY, JR. 1953b. Tropical prairie. *Audubon Field Notes*, **7**: 359-360.
- DAVIS, W. B. 1945. Notes on Veracruz birds. *Auk*, **62**: 272-286.
- DUGÈS, O. 1899. Hirondelles de Guanajuato, Mexico. *Auk*, **16**: 357-359.
- DUVALL, A. J. 1945. Random distributional records. *Auk*, **62**: 626-629.
- DWIGHT, J., and L. GRISCOM. 1927. A revision of the geographical races of the Blue Grosbeak (*Guiraca caerulea*). *Amer. Mus. Novit.*, 257: 1-5.
- EVENDEN, F. G., JR. 1952. Notes on Mexican bird distribution. *Wils. Bull.*, **64**: 112-113.
- FERRARI-PEREZ, F. 1886. Catalogue of Animals Collected by the Geographical and Exploring Commission of the Republic of Mexico. Part 2, Birds, by Fernando Ferrari-Perez, with descriptions of five new species, and critical remarks on others of great or less rarity or interest, by Robert Ridgway. *Proc. U. S. Natl. Mus.*, **9**: 130-182.

- FRIEDMANN, H., L. GRISCOM, and R. T. MOORE. 1950. Distributional Check-List of the Birds of Mexico. Part I. Pacific Coast Avif., **29**: 1-202.
- HELLMAYR, C. E. 1935. Catalogue of Birds of the Americas . . . Field Mus. Nat. Hist., Zool. Ser., 13 (8): vi + 541 pp.
- HELLMAYR, C. E. 1937. Catalogue of Birds of the Americas . . . Field Mus. Nat. Hist., Zool. Ser., 13 (10): vi + 228 pp.
- HELLMAYR, C. E. 1938. Catalogue of Birds of the Americas . . . Field Mus. Nat. Hist., Zool. Ser., 13 (11): vi + 662 pp.
- LINCOLN, F. C. 1925. Some results of bird banding in Europe. *Auk*, **42**: 358-388.
- LINCOLN, F. C. 1944. Chimney Swift's winter home discovered. *Auk*, **61**: 604-609.
- LOW, J. B., L. KAY, and D. I. RASMUSSEN. 1950. Recent observations on the White Pelican on Gunnison Island, Great Salt Lake, Utah. *Auk*, **67**: 345-356.
- LOWERY, G. H., JR. 1951. A Quantitative Study of the Nocturnal Migration of Birds. Univ. Kans. Publ., Mus. Nat. Hist., 3 (2): 361-472.
- LOWERY, G. H., JR., and W. W. DALQUEST. 1951. Birds from the State of Veracruz, Mexico. Univ. Kans. Publ., Mus. Nat. Hist., 3 (4): 531-649.
- MOORE, R. T. 1940. Notes on Middle American *Empidonaces*. *Auk*, **57**: 349-389.
- OBERHOLSER, H. C. 1912. A revision of the subspecies of the Green Heron (*Butorides virescens* [Linnaeus]). Proc. U. S. Natl. Mus., **42**: 529-577.
- OBERHOLSER, H. C. 1918a. Notes on the Subspecies of *Numenius americanus* Bechstein. *Auk*, **35**: 188-195.
- OBERHOLSER, H. C. 1918b. Notes on North American birds. VI. *Auk*, **35**: 463-467.
- OBERHOLSER, H. C. 1923. Bird banding as an aid to the study of migration. *Auk*, **40**: 436-441.
- PHILLIPS, J. C. 1911. A year's collecting in the state of Tamaulipas, Mexico. *Auk*, **28**: 67-89.
- RICHMOND, C. W. 1896. Partial list of birds collected at Alta Mira, Mexico, by Mr. Frank B. Armstrong. Proc. U. S. Natl. Mus., **18**: 627-632.
- RIDGWAY, R. 1901. The birds of North and Middle America . . . Part I. Bull. U. S. Natl. Mus., 50 (1): xxx + 715 pp.
- RIDGWAY, R. 1902. The birds of North and Middle America . . . Part II. Bull. U. S. Natl. Mus., 50 (2): xx + 834 pp.
- RIDGWAY, R. 1904. The birds of North and Middle America . . . Part III. Bull. U. S. Natl. Mus., 50 (3): xx + 801 pp.
- RIDGWAY, R. 1907. The birds of North and Middle America . . . Part IV. Bull. U. S. Natl. Mus., 50 (4): xxii + 973 pp.
- RIDGWAY, R. 1911. The birds of North and Middle America . . . Part V. Bull. U. S. Natl. Mus., 50 (5): xxiv + 859 pp.
- RIDGWAY, R., and H. FRIEDMANN. 1941. The birds of North and Middle America . . . Part IX. Bull. U. S. Natl. Mus., 50 (9): x + 254 pp.
- SALVIN, O., and F. DUC. GODMAN. 1887. Biologia Centrali-Americana. Aves. Vol. 1. (Taylor and Francis, London), xlv + 512 pp.
- SALVIN, O., and F. DUC. GODMAN. 1889. Notes on Mexican Birds. *Ibis*, 1889: 232-243.
- SALVIN, O., and F. DUC. GODMAN. 1897. Biologia Centrali-Americana. Aves. Vol. 2. (Taylor and Francis, London), ii + 598 pp.

- SALVIN, O., and F. DUC. GODMAN. 1904. *Biologia Centrali-Americana. Aves. Vol. 3.* (Taylor and Francis, London), iv + 510 pp.
- SANCHEZ, J. 1878. Datos para el Catálogo de las Aves que Viven en México y su distribución geográfico. *Anal. Mus. Nac. Mex.*, 1: 92-110.
- SAUNDERS, G. B. 1953. The Tule Goose (*Anser albifrons gambelli*), Blue Goose (*Chen caerulescens*), and Mottled Duck (*Anas fulvigula maculosa*) Added to the List of the Birds of Mexico. *Auk*, 70: 84-85.
- SAUNDERS, H. 1896. *Catalogue of the Birds in the British Museum. Vol. 25.* (London), xv + 475 pp.
- SCHLEGEL, H. 1864. *Muséum d'Histoire Naturelle des Pays-Bas. Monographie 27: Scolopaces: 60.*
- SCLATER, P. L. 1856a. *Synopsis Avium Tanagrarum.—A descriptive Catalogue of the known Species of Tanagers. Part 2.* *Proc. Zool. Soc. Lond.*, 1856: 108-132.
- SCLATER, P. L. 1856b. *Catalogue of the Birds collected by M. Auguste Sallé in Southern Mexico, with Descriptions of New Species.* *Proc. Zool. Soc. Lond.*, 1856 (1857): 283-311.
- SCLATER, P. L. 1857a. *On a Collection of Birds made by Signor Matteo Botteri in the vicinity of Orizaba in Southern Mexico.* *Proc. Zool. Soc. Lond.*, 1857 (1858): 210-215.
- SCLATER, P. L. 1857b. *On a Collection of Birds received by M. Sallé from Southern Mexico.* *Proc. Zool. Soc. Lond.*, 1857 (1858): 226-230.
- SCLATER, P. L. 1859a. *On a Series of Birds collected in the vicinity of Jalapa, in Southern Mexico.* *Proc. Zool. Soc. Lond.*, 1859: 362-369.
- SCLATER, P. L. 1859b. *List of Birds collected by M. A. Boucard in the State of Oaxaca in South-western Mexico, with Descriptions of New Species.* *Proc. Zool. Soc. Lond.*, 1859: 369-393.
- SCLATER, P. L. 1860. *Notes on a Collection of Birds from the Vicinity of Orizaba and neighbouring parts of Southern Mexico.* *Proc. Zool. Soc. Lond.*, 1860: 250-254.
- SCLATER, P. L. 1862a. *On some Birds recently Collected by M. Boucard in Southern Mexico.* *Proc. Zool. Soc. Lond.*, 1862: 18-20.
- SCLATER, P. L. 1862b. *Catalogue of a Collection of American Birds Belonging to Philip Lutley Sclater.* (Trübner, London), xvi + 338 pp.
- SCLATER, P. L., and O. SALVIN. 1869. *On a Collection of Birds made by Mr. H. S. le Strange near the city of Mexico.* *Proc. Zool. Soc. Lond.*, 1869: 361-364.
- SCLATER, P. L., and O. SALVIN. 1876. *A Revision of the Neotropical Anatidae.* *Proc. Zool. Soc. Lond.*, 1876: 358-412.
- SHARPE, R. B. 1888. *Catalogue of the Birds in the British Museum. Vol. 12.* (London), xvi + 872 pp.
- SHARPE, R. B. 1896. *Catalogue of the Birds in the British Museum. Vol. 24.* (London), xii + 795 pp.
- STONE, W. 1890. *On birds collected in Yucatan and Southern Mexico.* *Proc. Acad. Nat. Sci. Phila.*, [42]: 201-218.
- STORER, R. W. 1951. *Variation in the Painted Bunting (Passerina ciris), with special reference to wintering populations.* *Occ. Pap. Mus. Zool., Univ. Mich.*, 532: 1-12.
- SUMICHRASST, F. 1869. *The Geographical Distribution of the Native Birds of the Department of Vera Cruz, with a List of the Migratory Species.* *Mem. Boston Soc. Nat. Hist.*, 1 (4): 542-563.
- SUMICHRASST, F. 1881. *Enumeracion de las Aves Observadas en el Territorio de la República Mexicana.* *La Naturaleza*, 5, 1881 (1882): 222-250.



- SUTTON, G. M., and T. D. BURLEIGH. 1939. A list of birds observed on the 1938 Semple Expedition to northeastern Mexico. Occ. Pap. Mus. Zool. Louisiana State Univ., 3: 15-46.
- SUTTON, G. M., and T. D. BURLEIGH. 1940a. Birds of Las Vigas, Veracruz. Auk, 57: 234-243.
- SUTTON, G. M., and T. D. BURLEIGH. 1940b. Birds of Tamazunchale, San Luis Potosí. Wils. Bull., 52: 221-233.
- TRAYLOR, M. A., JR. 1949. Notes on some Veracruz birds. Fieldiana Zool., 31 (32): 269-275.
- WARNER, D. W., and R. M. MENGEL. 1951. Notes on Birds of the Veracruz Coastal Plain. Wils. Bull., 63: 288-295.
- WETMORE, A. 1943. The birds of southern Veracruz, Mexico. Proc. U. S. Natl. Mus., 93: 215-340.
- WETMORE, A. 1949. Geographical variation in the American redstart (*Setophaga ruticilla*). Journ. Wash. Acad. Sci., 39 (4): 137-139.

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