

NORTH AMERICAN MIGRANTS IN THE SIERRA DE TUXTLA OF SOUTHERN VERACRUZ, MÉXICO

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In March and April 1960, and during biogeographical studies from February to December 1962 involving the resident avifauna, I recorded many North American migrants in the Sierra de Tuxtla, an isolated mountain range bordering the Gulf of México about 90 kilometers southeast of Veracruz city. Loetscher (1955) summarized the known status of North American transients in Veracruz, and his data as well as those in the Mexican Check-List (Friedmann *et al.*, 1950; Miller *et al.*, 1957) are used as a basis for this paper. Also included in the present report are observations by A. R. Phillips (1947). Additional records of bird migrants for the Sierra are contained in Sclater (1857a, b), Wetmore (1943), Lowery and Dalquest (1951), Davis (1952), Amadon and Eckelberry (1955), and Coffey (1960). Data in this paper are confined to species in the American Ornithologists' Union Check-list (1957).

I know of 131 migrant bird species that have been reported from the Sierra de Tuxtla and the Gulf coastal sections at its base. The annotated list contains 67 species for which I believe there is significant information in regard to the Sierra and the state as a whole. It includes three species (*Tyrannus verticalis*, *Protonotaria citrea*, *Dendroica tigrina*) which apparently have not been reported from Veracruz, and six species not reported in the state outside of the west-central mountains. New seasonal and more extended migration dates are given for 26 species, and data are provided for at least 15 species rarely reported in Veracruz. The majority of the records in the list are based on sight observation; those supported by collected specimens are so noted in the accounts.

THE SIERRA AND MIGRATION

The position of the Sierra de Tuxtla on the north side of the relatively narrow Isthmus of Tehuantepec (225 kilometers wide) enables it to intercept some of the many transients passing through this continental constriction, and particularly those that normally migrate through the Gulf coastal plain. The mountain range is about 85 by 50 kilometers in maximum areal dimensions and is composed principally of four large volcanoes, the highest 1660 meters above sea level (see fig. 1). Low relief and a mountain peak alignment essentially parallel with the coastline preclude the Sierra de Tuxtla from acting as a physical barrier to most migrants. Yet it has sufficient height for several species to occur that usually migrate through mountainous regions. Apparently the distance that the Sierra is separated by lowlands from the mountains in Oaxaca is not enough to prevent such migrants from reaching it.

About one-half of the Sierra is forested. Most of this is a subformation of rain forest covering a large part of the Gulf-facing slopes. There are small areas of cloud forest on the four highest peaks, and sections of pine, oak, gum, and semideciduous tropical forest are located chiefly on the southern slopes. Much of the range is occupied by cultivated and weedy fields interspersed with thickets and primary and secondary forest remnants. Lake Catemaco is extensive and has only a few small marsh areas. Bahía Sontecomapan, considerably smaller than the lake, is fringed with grassy marsh and with mangrove and swamp forest. Both water bodies provide habitats for some migrant water and marsh birds. Thus the Sierra possesses a variety of humid and subhumid habitats where many transient birds find suitable cover and

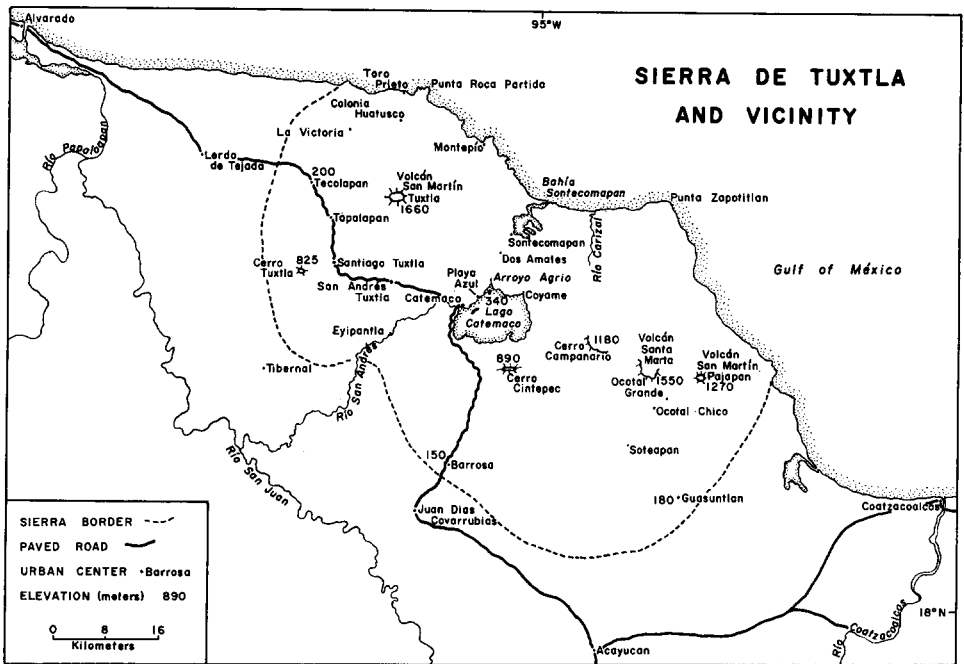


Figure 1.

food. Most land-bird migrants, however, frequent forest edges and openings, thickets and fields; the unbroken forest on the peaks and Gulf slopes is less attractive to them.

Migrating land and water birds are more evident in the Sierra during northers in late February, March, and April when adverse wind, low cloud cover, and rain appear to cause concentrations, especially in the Lake Catemaco basin. In August, September, and early October, when weather disturbances are usually local and less severe than in the spring, migrants seem to be more widely distributed. Large flights of hawks occasionally are seen just before and in the initial phase of northers in March and early April when pronounced orographic effects occur along the Gulf-facing slopes.

At times in spring I recorded high densities of small land-bird migrants, for example *Poliophtila caerulea*, *Wilsonia pusilla*, and *Passerina cyanea*, but did not encounter such areally concentrated "waves" as I have experienced in northeastern United States. My observations in the Sierra, however, support Loetscher's (1955:18) surmise that it is 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.

ANNOTATED LIST OF SPECIES

A date that extends the known time of occurrence for a species in Veracruz is italicized. Data are from my observations unless specified otherwise.

Ictinia mississippiensis. Mississippi Kite. Eight birds were moving west near Tibernal on 16 April 1962. Others were noted in the lowlands south of the Sierra. There appears to be a distinct movement of this species in Veracruz from about mid-April to early May.

Accipiter striatus velox. Sharp-shinned Hawk. Occurs regularly in small numbers (maximum

of six in one day), sometimes with large flights of other hawk species. Recorded first in autumn on 19 October, and last in spring on 16 April.

Accipiter cooperii. Cooper's Hawk. Apparently an uncommon migrant in the Sierra; the only records I have are 27 March 1960 (1, Coyame) and 30 October 1962 (1, N of Ocotál Grande).

Buteo platypterus platypterus. Broad-winged Hawk. A common migrant over the Sierra in March and April; less numerous in autumn and noted only in October. Spring dates range from 15 March (400, Coyame) to 26 April (1, La Victoria). Broad-winged Hawks are sometimes accompanied by Swainson's Hawks. Maximum numbers: 320, 1 April; 5100 (est. in one hour), 2 April; 550, 3 April; all in 1960 on the north side of the Lake Catemaco basin. Autumn dates extend from 7 October (30, Cerro Cintepec) to 29 October (2, Ocotál Grande). Loetscher (1955) does not mention any autumn migration dates for the state.

Buteo swainsoni. Swainson's Hawk. A fairly common migrant in spring. Recorded from 15 March (1, near Coyame) to 30 May (1, Tapalapan). Maximum number: 55, 17 March 1960, on the north side of the Lake Catemaco basin. Fall records are 13 August (1, Río Carizal) and 30 August (1, Cerro Tuxtla), the only records I have for the Sierra at this season. Apparently large numbers migrate through the lowlands south of the Sierra in autumn.

Pandion haliaetus carolinensis. Osprey. Recorded from 7 August (1, Bahía Sontecomapan) to 25 May (1, Bahía Sontecomapan), chiefly at low elevations, but also in flights of other birds of prey up to an elevation of slightly more than 400 meters. Observed on several occasions over Lake Catemaco and small crater lakes.

Falco peregrinus anatum. Peregrine Falcon. Only two were observed in the Sierra—above Dos Amates on 5 April 1960, and at Montepío on 27 March 1962. Loetscher (1955) mentioned two records for the state.

Falco columbarius. Pigeon Hawk. Single birds of this species were seen on three occasions—above Dos Amates on 25 March 1960, chasing a grackle (*Cassidix mexicanus*); at the same place on 1 October 1962; and north of Ocotál Grande on 29 October 1962.

Porzana carolina. Sora. The only record was one taken near Dos Amates on 8 April 1961, by Ramírez (reported in *litt.* from A. R. Phillips).

Gallinula chloropus cachinnans. Common Gallinule. Records are: 27 March (1, Lake Catemaco); 10 and 29 March (6, 2, Bahía Sontecomapan); 22 March (1, Toro Prieto). Loetscher (1955:26) cited two occurrences of the species on two days in March to the southwest of the Sierra near Isla.

Pluvialis dominica dominica. American Golden Plover. The only record was on 29 March 1962 (1, Bahía Sontecomapan).

Larus pipixcan. Franklin's Gull. Flocks move north and northwest over the Sierra in April and May. Earliest date is 14 April, the latest 8 May. The largest flock on 6 May contained an estimated 600 birds. Coffey (1960:293) reported the species as late as 26 May at Coatzacoalcos. My only autumn record is one bird on Lake Catemaco on 17 September 1962.

Gelochelidon nilotica aranea. Gull-billed Tern. Apparently only a few records for Veracruz have been published, although the species is probably regular in occurrence. Two to 15 birds were observed on four days over Lake Catemaco from 14 March to 3 April 1960.

Sterna albifrons. Least Tern. One bird of this species was noted over Lake Catemaco on 10 April 1960, and another in the same locality on 19 April 1962. Apparently the species seldom occurs inland or much above sea level in Veracruz.

Thalasseus maximus maximus. Royal Tern. From one to three birds were observed during northerly inland over Lake Catemaco on four occasions from 19 February to 3 April in 1960 and 1962.

Chlidonias niger surinamensis. Black Tern. Seen in groups of two to a maximum of 43 (5 May) over Lake Catemaco from 3 to 21 May. Loetscher listed no spring records. Coffey (1960:294) reported 40 as late as 27 May 1951, on the Río Papaloapan above Alvarado.

Coccyzus americanus. Yellow-billed Cuckoo. The only transient recorded was near Dos Amates on 20 May 1962. The species was noted in June and July at low elevations in the semi-deciduous forests on the inland side of the Sierra, where it probably breeds. A specimen collected there near Barrosa on 18 June 1962 was later accidentally destroyed.

Caprimulgus carolinensis. Chuck-will's-widow. On 17 April 1960 one was calling in the heavy forest above Dos Amates. Loetscher (1955:31) considered it a regular migrant and mentioned only four records for Veracruz in April and August.

Caprimulgus vociferus. Whip-poor-will. The only record is one collected by Dickerman near Playa Azul (340 meters) on 9 October 1962. Loetscher (1955:31) considered it regular in winter and in migration between 1500 and 7000 feet, but listed no autumn records.

Aëronautes saxatalis. White-throated Swift. Two birds were observed above Ocotal Grande on 29 October 1962, and another over the northwest shore of Lake Catemaco on 14 November 1962. The Mexican Check-List (Friedmann, *et al.*, 1950:161) mentions a sight record from Veracruz, and Loetscher (1955:48) referred the species to the hypothetical list for the state.

Tyrannus tyrannus. Eastern Kingbird. The latest of the few spring records is 16 May (1, Guasuntlan). Coffey (1960:294) reported one northwest of Coatzacoalcos on 18 May 1954. It is much more numerous in the Sierra in autumn migration when dates range from 16 August (14, 3 collected, Sontecomapan; Phillips, Dickerman) to 21 October (2, Playa Azul). Dickerman reported large flocks of hundreds in early September 1963, and collected an immature female at Playa Azul on 17 October 1962. An immature male was secured by Ramírez at Dos Amates on 18 September 1962 (reported *in litt.* from A. R. Phillips).

Tyrannus verticalis. Western Kingbird. One was observed at Playa Azul on 17 October 1962, by Phillips and Dickerman. Apparently this is the first report for Veracruz.

Muscivora forficata. Scissor-tailed Flycatcher. A common transient, most numerous in spring. Noted on 20 February (1, Playa Azul), but most occur after mid-March, and the latest spring date is 15 June (1, Arroyo Agrio). Loetscher (1955:32) indicated that possibly a few birds winter in Veracruz, and the Mexican Check-List (Miller *et al.*, 1957:69) states that the species winters in small numbers. In the Sierra small flocks that appear to be migrating occur regularly into December. The maximum observed in one day was 400 about five kilometers west of Coyame on 4 April 1960.

Myiarchus crinitus. Great Crested Flycatcher. Recorded uncommonly from 17 March (1, Playa Azul) to 17 April (1, Dos Amates). They probably occur regularly later in the spring for Carriker took one on Cerro Tuxtla on 7 May 1940. Fall dates are 24 September (1, collected [*M. c. boreus*], Dos Amates by Ramírez, reported *in litt.* from A. R. Phillips) to 29 November (1, Playa Azul).

Sayornis phoebe. Eastern Phoebe. The only record is of a bird heard and seen about four kilometers west of Coyame on 19 March 1960. Loetscher (1955:33) gave 15 and 18 March as the latest dates for central and northern Veracruz, respectively.

Empidonax traillii traillii. Traill's Flycatcher. A fairly common transient with the first record 14 August (1, collected, Río Carizal). The species becomes rather numerous in late August and early September, mostly at low elevations near the coast. Phillips and Dickerman secured specimens in late August 1963, near Sontecomapan. I have no definite spring records.

Empidonax virescens. Acadian Flycatcher. The sole record is a specimen in the Moore Collection (No. 51834) taken by C. C. Lamb on the northwest side of Lake Catemaco on 13 October 1950. Loetscher (1955:33) mentioned only one satisfactory record for the state, a female taken on 10 May 1901, at Jalapa by Nelson and Goldman.

Empidonax hammondi. Hammond's Flycatcher. Three were collected by Phillips on 6 and 11 December 1962, above Ocotal Chico. Apparently previously unrecorded outside of west-central Veracruz (Loetscher, 1955:17).

Contopus virens. Eastern Wood Pewee. The only spring date is a bird heard and seen near Dos Amates on 7 April 1960. Wood Pewees are more numerous in the fall, and dates extend from 15 August (1, Río Carizal) to 21 October (1 immature male, collected, Arroyo Agrio; Phillips). Two immature females were collected by Phillips and Dickerman on 9 and 10 October 1962, at Playa Azul.

Nuttallornis borealis. Olive-sided Flycatcher. I have no spring records. Autumn dates are from 19 August (1, collected, 15 miles S of Catemaco; Lamb) to 11 December (1, above Ocotal Chico; Phillips). I collected a female at Ocotal Chico on 23 October 1962, and Phillips collected

two birds in the same locality on 6 and 7 December 1962. The December birds appear to be late migrants. Loetscher (1955:34) mentioned one winter record for the state.

Riparia riparia. Bank Swallow. Loetscher mentioned only one record, a sight observation at Jalapa on 6 May 1939, but said that the species is probably a regular transient in small numbers. I have six spring observations numbering from one to 20 individuals over Lake Catemaco from 19 March to 27 April. Six were over La Victoria on 26 April 1962, and about 15 over Ocotal Chico on 16 May 1962, my latest spring date. On 17 May 1954, Coffey (1960:295) reported six south of Catemaco. The only autumn record is at least 100 Bank Swallows in a large swallow migration over Lake Catemaco on 16 September 1962.

Hirundo rustica erythrogaster. Barn Swallow. A common transient, noted as late as 10 November (1, Playa Azul). Coffey (1960:295) reported "Small numbers seen in Veracruz, early winter; . . ." Loetscher (1955:35) mentioned that the date of disappearance is not known, nor is there any winter record as yet.

Petrochelidon pyrrhonota. Cliff Swallow. Uncommon, but sometimes occurring in large numbers (200, 16 September, Lake Catemaco). Latest autumn date is 5 November (1, Playa Azul).

Progne subis subis. Purple Martin. My only records of this apparently rather rare transient are 19 and 22 March 1960 (6, 1, Lake Catemaco), and 21 March 1962 (4, Toro Prieto). Most were in adult male nuptial plumage. Loetscher (1955:36) mentioned four males taken at Catemaco by Nelson and Goldman on 2-4 May 1894.

Troglodytes aedon. House Wren. Apparently this species is rare in the Sierra. Single birds of unknown race were recorded in Lake Catemaco basin on 19, 20, and 23 March 1960. Autumn records include one at Ocotal Chico on 24 October, one at Playa Azul on 15 November, one collected by Phillips on 6 December 1962, above Ocotal Chico, and a specimen secured by Ramírez on 15 December 1962, at Dos Amates (reported *in litt.* from A. R. Phillips). The specimens are assignable to the race *T. a. parkmanii*, which is apparently here at the southern limits of its winter range.

Hylocichla ustulata. Swainson's Thrush. The species occurs in moderate numbers in the Sierra and was recorded from 1 October (1, Dos Amates) to 15 May (1, SW of Volcán Santa Marta). Phillips observed up to 10 individuals north of Ocotal Chico in early December 1962, and collected two, both of which he referred to *H. u. ustulata*, on 7 and 11 December. Carriker (Wetmore, 1943:305) secured a specimen (*H. u. almae* [= *H. u. swainsoni*]) on Volcán San Martín Tuxtla on 16 April 1940.

Regulus calendula. Ruby-crowned Kinglet. One was observed from close range near Ocotal Grande (about 600 meters altitude) on 30 October 1962; this is the only record. Loetscher (1955:37) remarked that the species is unrecorded in Veracruz lower than or south of Córdoba.

Bombycilla cedrorum. Cedar Waxwing. Recorded irregularly from 800 to 300 meters elevation usually in flocks of several to about 100 individuals. First autumn date is 15 November (1, Playa Azul), and the latest spring date is 15 May (6, SW of Volcán Santa Marta).

Vireo griseus. White-eyed Vireo. A regular but not common migrant and winter visitant, more numerous in fall. First date is 4 October (1, Arroyo Agrio). The specimen collected north of Ocotal Chico on 9 December 1962, by Phillips was assigned to the race *V. g. noveboracensis*.

Vireo flavifrons. Yellow-throated Vireo. This species is rather rare in the Sierra, apparently wintering at low elevations. There appear to be only four published reports for the state. In addition to the January record from Sontecomapan (Sclater, 1857b:227), I have five observations: 9 October (2, Playa Azul; Phillips, Dickerman); 14 November (1, Playa Azul); 26 November (1, N of Tiberinal); 19 March (1, Coyame); 22 March (1, Dos Amates).

Vireo olivaceus. Red-eyed Vireo. An uncommon migrant. The only spring date is 15 May (1, SW of Volcán Santa Marta). Fall dates are from 7 September (1, Playa Azul; *vide* Dickerman) to 24 October (4, N of Ocotal Chico). Phillips and Dickerman collected one above Dos Amates on 19 October 1962.

Vireo philadelphicus. Philadelphia Vireo. A rare migrant in the Sierra, recorded only in autumn. The three observations are: 19 October 1962 (2, 1 collected, Dos Amates; Phillips, Dickerman); 21 October 1962 (1, Dos Amates; Phillips, Dickerman); 24 October 1962, (1, N

of Ocotal Chico). Loetscher (1955:38) mentioned only one record (2, Presidio on 10 May) for Veracruz.

Vireo gilvus. Warbling Vireo. The only record is a specimen taken by Phillips north of Ocotal Chico on 12 December 1962, and assigned to the race *V. g. brewsteri*.

Protonotaria citrea. Prothonotary Warbler. One was observed in the low thickets along the Río Carizal near the coast on 14 August 1962. Two were there the following day. I collected a male on 23 September 1962, at Playa Azul. Dickerman reported one at Sontecomapan on 20 August 1963, and another there on 3 September 1963. I do not know of any previous reports from Veracruz.

Vermivora chrysoptera. Golden-winged Warbler. I have three records of this species, which is apparently very rare in Veracruz: 18 and 19 April 1960 (1, 1, Dos Amates) and 23 September 1962 (1, Playa Azul).

Vermivora pinus. Blue-winged Warbler. This species is a rather rare transient and winterer in the Sierra. There are apparently few records for the state. I have 12 observations from 23 September (1, Playa Azul) to 6 April (1, 2 kilometers S of Volcán San Martín Tuxtla). Phillips collected one near Dos Amates on 19 October 1962.

Vermivora peregrina. Tennessee Warbler. I have only two spring records of this rather uncommon migrant: 16 and 18 April (1, 1, Dos Amates). Carriker (Wetmore, 1943:311) collected one on 20 April 1940, near the top of Volcán San Martín Tuxtla. Amadon and Eckelberry (1955:67) recorded the species on 4 May at Tecolapan. The six autumn records extend from 23 September (1, Playa Azul) to 14 November (1, Playa Azul). Loetscher stated (1955:39) that as yet there were no autumn or winter records for the state, and the Mexican Check-List (Miller *et al.*, 1957:238) considered it a fairly common migrant in late spring and fall in Veracruz and a winterer in southern México.

Dendroica magnolia. Magnolia Warbler. A common transient and winter resident. Earliest fall date is 21 September (1, Cerro Cintepec).

Dendroica tigrina. Cape May Warbler. A male was studied closely at Catemaco on 20 March 1960, and presumably the same bird was there the following day. Apparently the species has not been recorded from Veracruz before.

Dendroica auduboni. Audubon's Warbler. The only spring record is 4 April 1960 (4, W of Coyame), at 375 meters elevation. These birds were in low shrubs in a freshly burned field during a strong norther. Phillips recorded the species on 7 and 14 December 1962 (2-3, above Ocotal Chico), and assigned a specimen collected there on the first date to the race *D. a. memorabilis*. Loetscher (1955:40) listed no records outside of west-central Veracruz.

Dendroica nigrescens. Black-throated Gray Warbler. A female, shot and subsequently lost by Phillips near Ocotal Chico on 6 December 1962, is the only record. Loetscher (1955:41) reported it as rare or casual in the highlands of Veracruz, citing only Orizaba as a locality.

Dendroica virens virens. Black-throated Green Warbler. A common migrant and winter visitant recorded as late as 20 May (1, Dos Amates). Single individuals were also found on 14 and 15 May at Guasuntlan and southwest of Volcán Santa Marta.

Dendroica occidentalis. Hermit Warbler. Recorded at and above Ocotal Chico on 23 and 24 October 1962, and by Phillips in the same locality from 6 to 14 December 1962. Phillips collected an adult male and an immature female on 6 December. Loetscher (1955:41) said that the species is common between 7000 and 10,000 feet altitude in Veracruz, considerably above the Sierra's highest point. He listed no records outside of west-central Veracruz.

Dendroica cerulea. Cerulean Warbler. The only record of this rare migrant is on 19 April 1960 (3, Dos Amates), in a "wave" including 10 species of warblers. Loetscher (1955:41) mentioned only two records for Veracruz.

Dendroica fusca. Blackburnian Warbler. I have three sight records of this very uncommon migrant, all single birds near Dos Amates on 19 April 1960, and 4 and 8 May 1962. Coffey (1960:296) reported one 15 miles southeast of Catemaco on 17 May 1954.

Dendroica dominica albilora. Yellow-throated Warbler. Occurs irregularly in migration and winter. Last spring date is 30 March (1, Playa Azul).

Dendroica pensylvanica. Chestnut-sided Warbler. Dates in spring range from 19 April (1,

Dos Amates) to 20 May (2, Dos Amates). The one fall record was 23 September (1, Playa Azul).

Seiurus motacilla. Louisiana Waterthrush. This species was recorded from 6 July (1, 5 kilometers S of Colonia Huatusco) on autumn migration and as late as 29 April (1, Montepío) in spring. There was also one on 7 July at Playa Azul.

Oporornis formosus. Kentucky Warbler. A fairly common transient and winter visitant recorded up to about 800 meters altitude. The first fall date is 12 August (1, NNE of Sontecomapan; Dickerman) and the latest spring date is 24 April (1, 4 kilometers S of Colonia Huatusco).

Oporornis tolmiei. MacGillivray's Warbler. Recorded only in the fall from 9 October (1, collected, Playa Azul; Phillips) to 12 December (Ocotal Chico; Phillips). Phillips collected five specimens on 7, 8, 9, and 11 December 1962, above Ocotal Chico. He referred the 7 December adult male to *O. t. tolmiei*, the 11 December adult male to *O. t. monticola*, and the remaining three to *O. t. intermedia*, one of those taken 9 December only tentatively (see Phillips, 1947:299).

Wilsonia citrina. Hooded Warbler. A fairly common transient and winter visitant noted from 15 August (1, Río Carizal) to 25 April (1, 5 kilometers S of Colonia Huatusco). Amadon and Eckelberry (1955:67) reported the species on 4 May 1952, at Tecolapan.

Wilsonia pusilla. Wilson's Warbler. A common migrant species, less numerous in winter. Latest spring date is 20 May (1, Dos Amates).

Wilsonia canadensis. Canada Warbler. This is an uncommon migrant in spring and fall. Fall dates are from 17 August (1, collected, 15 miles S of Catemaco; Lamb) to 10 October (1, collected, Playa Azul; Phillips).

Icterus bullockii. Bullock's Oriole. A fall and winter visitant to the Sierra. The only records are 28 and 30 October 1962 (4, 4, Ocotal Chico), and one in the same vicinity daily, except for the 7th, from 6 to 11 December 1962 (Phillips). Loetscher (1955:45) mentioned only two records for the state and indicated that the species is probably a rare winter visitant in the mountains.

Piranga ludoviciana. Western Tanager. A rather rare migrant and winter visitant of which I have six records. Dates are 19 and 20 March 1960 (1, 1, Coyame, S of Lake Catemaco), and from 6 to 9 December (maximum 7, 1 immature male collected, N of Ocotal Chico by Phillips *et al.*). Apparently not recorded in Veracruz outside of the west-central mountains.

Passerina ciris. Painted Bunting. An irregular and local migrant and winter visitant last recorded in spring on 29 April (1, Montepío). Phillips collected a male north of Ocotal Chico on 9 December 1962. This specimen was referred to the race *P. c. pallidior*.

Melospiza lincolni. Lincoln's Sparrow. A common migrant that winters in small numbers. Most numerous in the spring migration. Recorded in spring to 15 May (1, SW of Volcán Santa Marta). Phillips and Ramírez collected specimens on 8, 23, and 29 November, 7, 20, and 27 December, and 23 February. All are referable to the nominate race.

SUMMARY

The Sierra de Tuxtla, an isolated volcanic mountain range in southern Veracruz, México, occupies a geographic position favorable for the occurrence of many North American birds that normally migrate through the Gulf coastal plain. The Sierra's low relief and the generally parallel alignment of its major peaks with the coastline prevent it from acting as a barrier to most migrants.

A variety of humid and drier habitats in the Sierra provides suitable conditions for many migrants. The majority of land-bird migrants frequent forest edge, thickets, and semi-open places in preference to the unbroken forest which covers many of the peaks and much of the Gulf-facing slopes. Although the two large water bodies, Lake Catemaco and Bahía Sontecomapan, do not possess extensive marsh habitat, they attract some migrant water and marsh birds.

Northerners in late winter and early spring cause concentrations of some water and land-bird transients, but the birds tend to disperse more in the autumn when there are usually less severe weather disturbances. Hawks take advantage of the updrafts over the Sierra, and large flights occasionally occur in spring. High densities of small

passerines occasionally occur, and the number of migrants passing through the Sierra can be compared favorably with the number moving through areas of similar size in central and eastern United States.

One hundred and thirty-one species of migrant birds have been reported from the Sierra de Tuxtla and coastal areas at its base. Information on abundance in the Sierra is supplied for many of the 67 species in the selective annotated list. Three species are believed to be new for Veracruz. New seasonal dates and some earlier and later spring and autumn migration dates than have heretofore been published for migrants in Veracruz are given for 26 species. Six species have apparently not been previously recorded in Veracruz outside of the west-central mountains, and records are included of at least 15 species for which there have been few reports in the state.

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