

THE WILSON BULLETIN

A QUARTERLY MAGAZINE OF ORNITHOLOGY

Published by the Wilson Ornithological Club

Vol. 52

DECEMBER, 1940

No. 4

BIRDS OF TAMAZUNCHALE, SAN LUIS POTOSÍ¹

BY GEORGE MIKSCH SUTTON AND THOMAS D. BURLEIGH

TAMAZUNCHALE² is one of the best known, as well as one of the most interesting towns the tourist passes through in following the main highway from Laredo, Texas to Mexico City. It is situated on the Moctezuma River, at about 300 feet elevation, in extreme southeastern San Luis Potosí. Immediately south of it rise well-wooded mountains whose crowns and sides are patched with tiny clearings, corrals, and corn fields. In the shelter of the larger trees carefully tended coffee bushes grow, some of these "plantations" occupying level stretches of flood-plain, others clinging to steep slopes far above the river.

The forest about Tamazunchale can hardly be called dense, though it is tropical in character. There are, however, impenetrable tangles in the cut-over districts as well as along the forest edge; and the rough mountainsides, with their shaggy blanket of moss, ferns, and vines, are difficult to scale, almost the only safe route to higher elevations being the improved road itself or the dry, tortuous, boulder-strewn beds of streams.

The 1939 Semple Expedition spent a little more than two weeks investigating the Tamazunchale section, part of a day March 26, and the period from April 14 to 29. The junior author participated for a comparatively short time, finding it necessary to start north for the United States April 17.

On March 26 the three-man party worked a fine woodland near the Rio Axtla, twenty miles north of Tamazunchale. Here, even close to the highway, birds were abundant and noisy. From April 14 to 16 inclusive the immediate vicinity of Tamazunchale was thoroughly explored, especial attention being paid to certain brushy woodlands north of town, and to the crudely cultivated banks of the river. From April 17 to 29 Semple and Sutton visited several more or less distant places in addition to the Rio Axtla woodland

¹ Third of a series of papers on the 1939 John B. Semple Expedition to eastern Mexico.

² Present-day spelling of Temaxteocali, said to have meant "Temple of the Toad God." The town is familiarly known among tourists as "Thomas and Charlie."



HEAD OF EMERALD TOUCANET
(*Aulacorhynchus prasinus prasinus*)

From sketch in water-color by George Miksch Sutton, drawn
from a freshly-killed male specimen taken near Tamazunchale
San Luis Potosí, April 26, 1939.

above referred to—the vicinity of Palitla, a village just over the ridge to the north of Tamazunchale; the flat country about Matlapa and Jalpilla, villages a few miles north of Palitla; and the banks of the Moctezuma and certain wooded ravines from four to ten miles south of Tamazunchale. A brief visit was made to the village of Axtla (on the Axtla River, a few miles east of the main highway) April 25; and on the way north to Valles, on April 29, important stops were made near Xilitla and at El Xolol.

On April 26 the senior author chanced to follow a dry stream bed back from the highway several miles into the mountains. Here, at a point which must have been ten miles south or southeast of Tamazunchale, and at an elevation of between 2,000 and 3,000 feet, he came upon a clear, cool stream, a fair-sized torrent that appeared to originate as a fall, that slipped swiftly along the base of the mother-cliff for several hundred yards, roared as it widened and changed course, then suddenly disappeared underground. Enchanted with this weird and beautiful thing, he returned on the two following days. Far above him, back and forth across the face of the vine-hung cliff, huge flocks of green parakeets flew. At a distance they looked like young leaves stripped from the treetops and blown by a fierce wind. Their screeching could be heard even above the noise of the cataract; but a more memorable sound was the ear-splitting squawks of the macaws that flew, pair by pair, overhead. The tall *jobo* trees were laden with ripe fruit. Here the parrots, big, middle-sized and little, came to feed. Other animal life was scarce, though now and then a squirrel barked, a hummingbird darted by, or a huge damsel fly idled past on wings that flashed steel-blue and silver.

The following list of 142 forms is considerably larger than that made by the Semple Expedition at Valles³, less than 70 miles to the north. There are several reasons for this. First, more time was spent at Tamazunchale—a total of 432 man-hours in the field, as against the 240 man-hours spent at Valles. Second, at Tamazunchale much work was done along the Moctezuma and Axtla Rivers and certain of their tributaries, whereas at Valles no work was done along any stream. Third, the topography and vegetation are much more varied at Tamazunchale than at Valles. Because of the abundance of tree growth at the former place it is quite possible that many familiar birds of the eastern United States (such as the Baltimore Oriole, Catbird, Indigo Bunting, and Rose-breasted Grosbeak) winter regularly there but not at Valles or that, in their spring migration, they linger at the foot of the mountains near Tamazunchale, then fly *over* the Valles district to more favored feeding- or resting-grounds farther north.

The authors gratefully acknowledge the assistance of members

³ Only 87 forms (species and subspecies) were recorded at Valles at virtually the same season (*Condor*, 42, 1940: 259-62).

of the staff of the following institutions: the Museum of Comparative Zoology at Harvard College; the American Museum of Natural History; the United States National Museum; and the Fish and Wildlife Service of the United States Department of the Interior. In particular do they wish to thank Mr. James Lee Peters, who was good enough to identify six swifts and a Wood Owl for them; and Dr. J. Van Tyne, who assisted in certain nomenclatural problems.

Crypturellus cinnamomeus (Lesson). Cinnamomeous Tinamou. Encountered only in brushy woodlands in low, comparatively flat country. Heard repeatedly a mile or so north of Tamazunchale and on April 18 in the vicinity of Jalpilla and Matlapa.

Polioccephalus dominicus (Linnaeus). Least Grebe. Two seen April 25 swimming slowly upstream along the Axtla River, not far from the village of Axtla.

Phalacrocorax olivaceus (Humboldt). Olivaceous Cormorant. Seen along the Moctezuma River several times, notably on April 16, when as many as twenty were counted; and along a small stream near Jalpilla, April 21, when six were seen.

Butorides virescens (Linnaeus). Green Heron. Recorded twice: April 17, when one was seen along the Moctezuma, four miles south of Tamazunchale; and April 21, when three were seen along a small stream near Jalpilla.

Florida caerulea (Linnaeus). Little Blue Heron. One in blue plumage seen near Jalpilla, April 21.

Casmerodius albus egretta (Gmelin). American Egret. Adult female, with full train of nuptial plumes, taken near Jalpilla, April 21 (Semple).

Querquedula discors (Linnaeus). Blue-winged Teal. Four pairs in a flock seen along the Moctezuma River seven miles south of Tamazunchale, April 17.

Coragyps atratus (Bechstein). Black Vulture. Noted every day. Especially common about the towns and along the improved roads.

Cathartes aura (Linnaeus). Turkey Vulture. Like the Black Vulture, a common and virtually ubiquitous species.

Ictinia mississippiensis (Wilson). Mississippi Kite. Recorded twice in the flat country just north of Matlapa, two being seen on April 18, one on April 20.

Buteo magnirostris griseocauda (Ridgway). Gray-tailed Hawk. Hawks were uncommon in the Tamazunchale region. The present species was noted occasionally in open, comparatively flat country. A nesting female, with well defined brood-patch, was shot April 19, along the Axtla River (Semple).

Asturina nitida plagiata Schlegel. Mexican Goshawk. Uncommon. One seen April 16 along the Moctezuma River not far from Tamazunchale. Breeding male taken near Matlapa, April 18 (Semple).

Pandion haliaetus (Linnaeus). Osprey. One seen flying along the Moctezuma River near Tamazunchale, April 24.

Micrastur semitorquatus (Vieillot). Collared Micrastur. One noted April 15, at dusk, a mile north of Tamazunchale.

Herpethores cachinnans chapmani Bangs and Penard. Mexican Laughing Falcon. Noted but once: a male, in soiled, badly worn plumage, taken near Jalpilla, April 18 (Semple).

Polyborus cheriway audubonii Cassin. Audubon's Caracara. Nesting pair encountered April 21, near Jalpilla. Not certainly identified elsewhere in the district.

Ortalis vetula vetula (Wagler). Chachalaca. Common in brushy woodlands. Female, with ovary somewhat enlarged, taken April 26 in shallow ravine leading back from the Moctezuma, seven miles south of Tamazunchale.

Colinus virginianus maculatus Nelson. Spotted-breasted Bob-white. Fairly common in open, brushy woodlands. Noted several times in the vicinity of Jalpilla

and Matlapa, a breeding male being taken at the latter place April 18 (Semple).

Tringa solitaria cinnamomea (Brewster). Western Solitary Sandpiper. The Solitary Sandpiper was recorded twice: a single bird seen at a woodland pool near the Axtla River, April 18; and a female collected near Matlapa, April 24 (Sutton). The belly plumage of the latter was somewhat stained with oil. This specimen is clearly of the western subspecies, the inner web of the outermost primary being marbled with grayish white at the base, the wing measuring 137 mm., the bill 34.

Actitis macularia (Linnaeus). Spotted Sandpiper. Single birds noted repeatedly along the Moctezuma River south of Tamazunchale, April 14 to 16.

Columba flavirostris flavirostris Wagler. Red-billed Pigeon. Noted daily along the borders of the heavier woodlands, especially near the Moctezuma River from four to seven miles south of Tamazunchale. Breeding male taken near Palitla, April 29 (Semple).

Zenaidura macroura (Linnaeus). Mourning Dove. Noted infrequently along the roads and in opener country. Small flock seen near Tamazunchale, April 24.

Zenaida asiatica asiatica (Linnaeus). Eastern White-winged Dove. Fairly common in the vicinity of Jalpilla and Matlapa, and along the Axtla River. Not seen south of Tamazunchale. Especially abundant north of the Axtla River in the vicinity of El Xolol where large flocks were seen along the highway and a breeding female was taken April 29 (Sutton). The wing of this specimen measures 150 mm., the tail 100.

Scardafella inca (Lesson). Inca Dove. Noted infrequently about the towns. Fairly common in Tamazunchale.

Columbigallina passerina pallescens (Baird). Mexican Ground Dove. Noted here and there in opener country wherever we went. Especially common about Matlapa and Jalpilla, where several pairs were breeding. At the former place a nest with egg and newly hatched young was found April 20, and a male (in irregular molt) was taken April 24.

Columbigallina talpacoti rufipennis (Bonaparte). Ruddy Ground Dove. Found wherever *C. passerina* was found, and commoner. Two nests with small young found and breeding male and female collected near Matlapa, April 24. Male taken at same place April 29.

Claravis pretiosa (Ferrari-Perez). Blue Ground Dove. Rare, but seen infrequently near Matlapa, Jalpilla and the village of Axtla. A pair, noted from time to time flying through Tamazunchale, must have been nesting in the very heart of town.

Leptotila verreauxi angelica Bangs and Penard. White-fronted Dove. Common wherever we went, being found singly or in pairs. A female (laying eggs) was taken April 20 at Palitla, and a male (testes much enlarged) was taken near Tamazunchale, April 27.

Leptotila plumbeiceps plumbeiceps (Sclater and Salvin). Plumbeous-headed Dove. Noted infrequently in well-wooded sections. Female with much enlarged ovary taken in flooded woodland near El Xolol, April 29 (Sutton).

Ara militaris (Linnaeus). Military Macaw. Scattered pairs seen April 18 (near Jalpilla), April 21 (along the Axtla River), and April 24 to 29 in wooded ravines leading off from the Moctezuma River, from four to eight miles south of Tamazunchale.

Aratinga holochlora holochlora (Sclater). Green Parakeet. Abundant in certain heavier woodlands along the Axtla and Moctezuma Rivers and at considerable elevations in the mountains (2,500 to 3,000 feet) where there were fruit-bearing trees. Specimens taken April 14 to 17.

Amazona viridigenalis (Cassin). Red-crowned Parrot. Noted infrequently in heavier woodlands along the Axtla River and four or five miles upstream from Tamazunchale along the Moctezuma. Pair and their nest discovered at latter place, April 20 (Semple). Breeding female taken along Axtla River, April 22.

On this date a Red-crowned Parrot was seen to attack and put to flight a Brown Jay that probably had invaded the former's nesting territory.

Piaya cayana thermophila (Sclater). Central American Squirrel Cuckoo. Fairly common in heavier woodlands, especially along the rivers. A female, taken April 26 in a well-wooded ravine seven miles south of Tamazunchale, was laying eggs.

Coccyzus americanus (Linnaeus). Yellow-billed Cuckoo. Noted but once, a single bird, near Jalpilla, April 21.

Crotophaga sulcirostris sulcirostris Swainson. Groove-billed Ani. Noted infrequently. Male taken near Jalpilla, April 19 (Semple).

Ciccaba virgata centralis Griscom. Central American Wood Owl. A mottled, middle-sized owl, presumably a Wood Owl, was noted at night on April 14, and again on April 15. Our only definite record, however, is of a male taken after dark five miles up the Moctezuma River from Tamazunchale on April 17 (Sutton). The eyes of this bird shone dull red in the rays of a strong flashlight. It gave a piercing screech. Its stomach contained but one item—a middle-sized, slender-legged, flesh-colored hairless spider.

Mr. James L. Peters has been good enough to compare our bird with the type of *C. v. tamaulipensis* (Phillips) at the Museum of Comparative Zoology. He reports (in a personal letter to the senior author, dated November 18, 1940) on the comparison as follows: "Your bird has not only a darker ground color above, but the pale markings are much reduced in area and of a darker color; the broad silky feathers surrounding the facial disk have a brownish wash, with dark shaft streaks and edgings, whereas in *tamaulipensis* these same feathers are pure white externally, with dark bases. Below the two birds are marked about the same, but your specimen is more suffused with brownish across the breast and *tamaulipensis* has a buffy wash on posterior underparts."

Mr. Peters further states that our bird is "very close indeed to specimens of the pale phase of *C. v. centralis* and . . . an almost perfect match for a specimen of *centralis* from British Honduras."

Glaucidium brasilianum ridgwayi Sharpe. Ferruginous Pigmy Owl. Common wherever we went, its insistent hooting being heard during daylight hours as well as at dusk. Breeding pair taken two miles north of Tamazunchale, April 15. Nest with two fresh eggs found April 27, in stub about twelve feet from ground. The bird at the nest was the male. It called *while at the nest* (Semple). Nest with three fresh eggs found in deserted woodpecker hole about fifteen feet from ground near El Xolol, April 29 (Sutton). Male and female specimens taken April 15 to 29 represent both the grayish brown and rufescent phases of plumage.

Nyctidromus albicollis merrilli Sennett. Merrill's Pauraque. Fairly common in brushland near the rivers. The wing of a breeding male taken April 24 measures 174 mm.; that of a female (April 15) 174.5.

Caprimulgus serico-caudatus salvini Hartert. Salvin's Whippoorwill. Fairly common in brushlands at low elevations. One specimen taken: a male, with much enlarged testes, two miles north of Tamazunchale, April 20 (Semple).

Streptoprocne zonaris mexicana Ridgway. Mexican Collared Swift. Abundant along the Axtla River and at Matlapa and Jalpilla, April 18–20, hundreds being seen in the air at once. The birds could not have been far from their nesting-grounds, for the gonads of specimens captured were much enlarged. The wing measurement in two males is exactly the same: 211 mm.

Chaetura pelagica (Linnaeus). Chimney Swift. Small swifts, all of them more than likely of the genus *Chaetura*, were seen daily April 14 to 24. They could not be identified without shooting, however, and they were very difficult to shoot. Male and female specimens taken from foraging flocks near Matlapa and at Tamazunchale April 18 to 23 prove, with one exception, to be common eastern Chimney Swifts⁴. None of them was in breeding condition.

⁴ Identification of all specimens of *Chaetura* checked by Mr. James Lee Peters.

Chaetura vauxi (Townsend). Vaux's Swift. A female *Chaetura* collected from a rapidly circling flock near Matlapa, April 18, proves to be *vauxi*. The ovary was slightly enlarged.

Pampa pampa curvipennis (Lichtenstein). Curved-winged Sabre-wing. This interesting species, which we referred to familiarly as the "singing hummingbird," was encountered repeatedly from April 17 to 28 in woodlands not far from water. The "singing" males had favorite perches. Here they squeaked, chipped and sputtered, turning their heads nervously from side to side. They were very pugnacious and curious. If we crept through the underbrush toward them they frequently came to meet us, whirring down into our very faces, then backing up abruptly to settle upon one of their chosen "singing perches," where they chattered furiously.

A female taken April 24 at Palitla was molting about the head. The ovary of this specimen was considerably enlarged.

Amazilia yucatanensis cerviniventris (Gould). Fawn-bellied Hummingbird. Fairly common in shaded woodlands. The testes of a male taken along the Axtla River, March 26, were not enlarged. A female taken April 18, near Matlapa, was laying eggs. On April 20, at Palitla, a nest with two fresh eggs was found four feet from the ground at the side of a pleasant path through the forest. The brooding female did not fly off until the nest was touched (Sutton).

Chlorostilbon canivetii canivetii (Lesson). Canivet's Emerald. Noted daily from April 15 to the end of our stay, usually in opener, drier woodlands. Males frequently were to be seen perched on wires along the highway or on slender dead twigs that stuck up from the shrubbery. A male taken April 18 at Matlapa apparently is subadult, most of the belly feathers being grayish white rather than shining green at their tips.

Agyrtrina candida (Bourcier and Mulsant). White-bellied Emerald. Noted but once, a breeding male taken along a dry stream-bed in heavy woodland at about 2,500 feet on a mountainside above the Moctezuma River 7 miles south of Tamazunchale (Sutton).

Eugenes fulgens (Swainson). Rivoli's Hummingbird. Male noted April 24, near Palitla.

Anthracothorax prevostii prevostii (Lesson). Prevost's Mango. Two breeding males taken in open fields: April 16, near Tamazunchale; and April 22, along the Axtla River (Sutton).

Trogon ambiguus ambiguus Gould. Coppery-tailed Trogon. Noted with certainty but once: a female (ovary unenlarged) taken along the Axtla River, April 22 (Semple). This specimen is decidedly grayer on the head, chest, back, rump and upper tail coverts than average *T. a. ambiguus*. Noticeable grayish white barring on the tertials and inner secondaries, as well as the irregular, somewhat blotchy markings on the outer rectrices, probably indicate immaturity.

Trogon collaris puella Gould. Jalapa Trogon. Noted only in heavier woodland on mountainsides at from 1,500 to 2,500 feet elevation. Male taken April 27 seven miles south of Tamazunchale (Sutton). The call-note of this bird (and of the female, which was not collected) was a plaintive "kee-koo, kee-koo."

Trogon caligatus sallaei Bonaparte. Northern Gartered Trogon. The commonest Trogon of the region, and apparently the only species breeding at low elevations. We came upon it infrequently along shaded streams, finding it always in pairs. A nest found not far from the Axtla River, April 25, was at the end of a burrow among orchid roots, thirty feet from the ground in a great tree. Here our attention was first attracted by the peevish cries of the female bird, perched on a dead twig. She was seen to flutter time after time to the nest entrance, but she could not gain a foothold because the male was clinging there.

The birds were watched for some time. The male clung at the entrance for almost ten minutes. His tail was bent badly out of shape at the tip, presumably from being jammed in the nest. Finally he went in. The female now stationed

herself at the entrance, propping herself with her tail. She stayed there virtually motionless for ten minutes, then flew back to the dead twig to resume her crying. At length the male appeared, swooped briskly out, and the female, with an alacrity not often observed in trogons, fluttered to the nest and crept in (Sutton).

Megaceryle torquata (Linnaeus). Ringed Kingfisher. Noted but once, a single bird flying along the Moctezuma River near Tamazunchale, April 16.

Chloroceryle americana (Gmelin). Green Kingfisher. Noted but once: April 16, a single bird along the Moctezuma River several miles upstream from Tamazunchale.

Momotus coeruliceps (Gould). Blue-crowned Motmot. Fairly common in well shaded woodlands near the Moctezuma, males being collected April 14 and 27 (Semple and Sutton).

Ramphastos sulfuratus Lesson. Keel-billed Toucan. A large black toucan, with yellow throat, was seen April 13, not far from the Axtla River. It flew down from a hill-top to a huge, fruit-bearing tree to feed with mixed flocks of smaller birds (Sutton).

Aulacorhynchus prasinus prasinus (Gould). Emerald Toucanet. Noted repeatedly in heavier woodland along the Moctezuma River from six to ten miles upstream from Tamazunchale, male specimens being taken there April 14 and 26 (Semple and Sutton). In freshly killed birds the pupil was round, the iris dark brown, and the bill strikingly black, white, mahogany brown and light greenish yellow (see frontispiece).

The species was known locally as the "pájaro verde" or "green bird." We encountered it in small companies rather than in pairs, as a rule, finding it secretive and rather hard to see. The only call-notes we heard from it were low, hoarse croaks. One seen April 26 had a malformed (open) bill, the mandibles meeting only at the tip, the bold serrations along the culmen in consequence being unusually noticeable.

Chloronerpes aeruginosus (Malherbe). Lichtenstein's Woodpecker. Noted but twice: near Palitla, where one was seen April 24; and along the Moctezuma River, 7 miles upstream from Tamazunchale, where a breeding male was taken April 26 (Sutton).

Centurus santacruzi grateloupensis (Lesson). Santacruz Woodpecker. Fairly common among larger trees along the Moctezuma. A male taken by Burleigh at Tamazunchale, April 14, obviously represents the present subspecies for it is even paler throughout the underparts than spring specimens from Cordoba, Veracruz.

Scapanus guatemalensis regius (Reichenbach). Veracruz Ivory-billed Woodpecker. Fairly common in heavier woodlands. Our only specimen, a breeding male, taken by Semple along the Moctezuma four miles upstream from Tamazunchale, is of the present race, the wing measuring 202 mm.

Veniliornis oleaginus oleaginus (Lichtenstein). Oleaginous Woodpecker. Noted only in deeper woodlands along the Axtla River, where a breeding male was taken March 26 (Sutton) and two birds were observed April 25. The wing of our specimen measures 101.5 mm., the tail 54.

Xiphorhynchus flavigaster flavigaster Swainson. Ivory-billed Woodhewer. Fairly common in brushy as well as heavier woodlands, breeding specimens being taken April 20-27.

Platyparis aglaiae gravis van Rossem. Northern Rose-throated Becard. Seen daily, mated pairs being noted from April 17 to the end of our stay. Three nests found, each of them roughly spherical, made of twigs, and suspended from the tip of a swaying branch. The first of these, found by Semple on April 17, was fifty feet or more from the ground, at the very tip of a supple bough that whipped back and forth in the wind. Here the birds went on with their building work, heedless of the commotion. Our two specimens measure: male, wing, 93.5 mm., tail, 70; female, wing, 96.5, tail 73.

Tityra semifasciata personata Jardine and Selby. Mexican Tityra. Fairly common, especially along the Moctezuma River upstream from Tamazunchale, where sparring males or mated pairs were observed repeatedly. Pairs seen at or near deserted woodpecker holes, April 14 to 20, were thought to be nest-hunting. A female that was laying or brooding eggs was frightened from such a hole April 25.

The naked space about the eyes in freshly collected specimens was raspberry red, much brighter in males than in females.

Thamnophilus doliatus mexicanus Allen. Mexican Ant Shrike. Fairly common in brushy woodlands, especially about Jalpilla and Matlapa. At the latter place a female with fully formed egg in the oviduct was taken April 24 (Sutton).

Griscom, in his "Distribution of Bird-Life in Guatemala" (*Bull. Amer. Mus. Nat. Hist.*, 64, 1932: 233), characterizes *Thamnophilus doliatus intermedius* Ridgway as "a variable bird," ranging from "southern Mexico to western Panama on Caribbean slope, and Pacific coast of Guatemala," apparently expecting us to believe that San Luis Potosí and "Pacific coast of Guatemala" birds are the same. With this concept we cannot concur, since our Tamazunchale (and Valles) specimens are very long-tailed by comparison with *intermedius* from Guatemala and Honduras. It appears from a careful examination of all pertinent material in the U. S. National Museum, the American Museum of Natural History, and the Museum of Comparative Zoology, that J. A. Allen, in bestowing the name *mexicanus* upon Cabanis' and Heine's "*Thamnophilus affinis*" (from Jalapa, Veracruz) was actually naming an intermediate race. Insofar as Jalapa, Veracruz birds themselves are concerned, therefore, *T. d. mexicanus* Allen might stand as a synonym of *T. d. intermedius*, but since Jalapa birds tend to be longer-tailed than those from Honduras it seems eminently sensible to use the name *mexicanus* for long-tailed, northward-ranging birds (such as those collected by us in San Luis Potosí) rather than to complicate matters further by finding an entirely new name for them.

The tail in ten Guatemala male *intermedius* selected at random from the M. C. Z. collection measures: 60, 58, 66, 61, 65, 66, 66, 62, 60, and 64 mm.; in ten Honduras male *intermedius*: 63, 64, 64, 65, 63, 63, 63, 65, 62, and 64; in San Luis Potosí male *mexicanus* at hand; 72, 72.5 and 72.

Tyrannus melancholicus couchii Baird. Couch's Kingbird. Common in open country, especially along the Moctezuma River not far from Tamazunchale. The gonads of a male and a female specimen taken April 16 were somewhat enlarged.

Legatus leucophaeus variegatus (Sclater). Greater Striped Flycatcher. Fairly common along the edges of woodlands. Breeding males taken March 26 and April 15. The wing in these measures 91 and 96 mm., clearly indicating this larger race.

Myiodynastes luteiventris luteiventris Sclater. Sulphur-bellied Flycatcher. Fairly common along the rivers, nesting pairs being encountered daily. Our two specimens (female, April 14; male, April 20) agree with birds from more southern parts of Mexico in being warmly toned on the back, but *swarthi* (described from Arizona) appears to be a not very strongly marked race.

Megarynchus pitangua (Linnaeus). Boat-billed Flycatcher. Fairly common. April 15 a pair were discovered at a woodland pool not far from Tamazunchale. Their nest, which was very bulky, was placed in an exposed position in the top of a leafless tree that stood in the water (Burleigh).

Myiozetetes similis texensis (Giraud). Giraud's Flycatcher. Fairly common, breeding pairs being encountered daily throughout our stay. April 14 birds with nesting material in their bills were seen. April 21, near Jalpilla, a nest was found among the leaves of an air plant on a horizontal branch twenty feet from the ground. The nest, being composed of dry grasses, was plainly discernible, the more so because the noisy and demonstrative owners remained so close to it (Sutton).

Pitangus sulphuratus (Linnaeus). Derby Flycatcher. Common, nesting pairs being seen daily.

Myiarchus cinerascens (Lawrence). Ash-throated Flycatcher. Three seen near Jalpilla, April 18.

Myiochanes richardsonii (Swainson). Western Wood Pewee. Noted twice, a single bird April 23 and a single bird April 24, along the Axtla River. The call-note was clearly that of the western rather than of the eastern species.

Empidonax minimus (Baird). Least Flycatcher. Identified with certainty but once, a single bird that gave its "che-bec" call-note several times, April 27, along the Axtla River, twenty miles north of Tamazunchale.

Empidonax sp. From April 14 to 18 the absence of small flycatchers of this genus was notable. On the latter date several were seen, and between then and April 23 a migratory wave passed through. No specimen collected.

Nuttallornis borealis (Swainson). Olive-sided Flycatcher. Single bird seen April 23 on the outskirts of Tamazunchale.

Tachycineta thalassina (Swainson). Violet-green Swallow. Noted but once, a flock circling over the Moctezuma River near Tamazunchale, April 16.

Stelgidopteryx ruficollis (Vieillot). Rough-winged Swallow. Noted but once, a mixed flock of Cliff Swallows and Rough-wings, seen not far from Tamazunchale along the Moctezuma, April 18.

Petrochelidon pyrrhonota (Vieillot). Cliff Swallow. Noted but once, April 18, as indicated above.

Progne chalybea chalybea (Gmelin). Gray-breasted Martin. A colony of twenty-some pairs nested about the bridge spanning the Axtla River twenty miles north of Tamazunchale. Here a male and female were taken April 21.

Psilorhinus morio (Wagler). Brown Jay. Fairly common. A nest found April 22 was broad and flat, and situated about fifteen feet from the ground among the bare lower branches of a large tree. The parent bird, presumably the female, was brooding (Semple). April 25, a partly finished nest was found not far from the Axtla River, again on a leafless branch in a shaded part of the forest, about twenty feet from the ground (Sutton).

Xanthoeca luxuosa luxuosa (Lesson). Green Jay. Common. Our only specimen (male, Axtla River, April 25) measures: wing, 118 mm., tail 138.

Parus atricristatus atricristatus Cassin. Black-crested Titmouse. Fairly common in opener woodlands. The wing of our only specimen (female, April 15, Burleigh) measures 67 mm.

Cistothorus platensis stellaris (Naumann). Short-billed Marsh Wren. Noted but once, a company of scolding and singing birds in a marshy spot near Matlapa, April 18. From these a male with slightly enlarged testes was taken. Though in the midst of an extensive prenuptial molt, this bird was singing with fervor (Sutton).⁵

Thryothorus maculipectus microstictus (Griscom). Northern Spotted-breasted Wren. Fairly common, male and female specimens being taken April 14 to 23. On April 23 a partly completed nest was discovered near Tamazunchale (Sutton).

Troglodytes domesticus Wilson. House Wren. Noted infrequently April 14 to 21. No specimen taken.

Henicorhina leucosticta prosthelauca (Sclater). Sclater's Wood Wren. Fairly common, being found as a rule in less brushy woodlands than those favored by *Thryothorus maculipectus*, though the two species were occasionally encountered side by side. Breeding males taken near Tamazunchale April 23 to 27.

Toxostoma longirostre (Lafresnaye). Long-billed Thrasher. Seen repeatedly in brushy woodlands. No specimen collected.

Dumetella carolinensis (Linnaeus). Catbird. Noted repeatedly April 15 to 22. Not so common thereafter, but recorded infrequently until April 28. Female taken at Jalpilla, April 19 (Semple).

Turdus grayi Bonaparte. Gray's Robin. Fairly common in big trees along the

⁵ See note in *Auk*, 57, July, 1940: 419.

outskirts of Tamazunchale, singing males being heard from April 15 to the end of our stay.

Hylocichla ustulata (Nuttall). Spruce-woods Thrush.⁶ Thrushes of this species were seen and heard singing frequently April 18 to 28, but no specimen was taken.

Catharus aurantiirostris melpomene (Cabanis). Nightingale Thrush. Noted but once, a male taken in a densely thicketed ravine near the Axtla River, April 22 (Sutton). This specimen was molting about the face and throat. The testes were only slightly enlarged. The breeding ground of this form is said to be the "highlands" of southern Mexico, so the valley of the Axtla is probably part of its winter range.

Polioptila sp. Gnatcatchers were seen from time to time in brushy woodlands in the immediate vicinity of Tamazunchale, but no specimen was collected.

Bombycilla cedrorum Vieillot. Cedar Waxwing. Several large flocks seen along the Axtla River, April 19.

Vireo griseus micrus Nelson. Small White-eyed Vireo. White-eyed Vireos were noted repeatedly in brushy woodlands, especially in the vicinity of Jalpilla and Matlapa. A mated pair taken at the former place April 19 are referable to the present race (wings in both specimens 55 mm.) though the fact that they are definitely yellower below and greener (less gray) above than February *micrus* from Nuevo Leon suggests that they may be somewhat intermediate between *micrus* and *perquisitor* Nelson, the latter a little known form described from Palantla, Veracruz.

Vireo solitarius (Wilson). Blue-headed Vireo. Noted daily April 14 to 22. No specimen taken.

Vireo virescens flavoviridis (Cassin). Yellow-green Vireo. Noted daily in woodlands of all sorts. Everything about the bird (its song, manner, and habitat) suggested the common Red-eyed Vireo of the eastern United States. Male and female specimens taken April 14 to 22.

Cyclarhis gujanensis flaviventris Lafresnaye. Mexican Pepper Shrike. This sweet-voiced bird was fairly common in brushy woodlands. A female taken by Semple, seven miles south of Tamazunchale, April 28, was laying eggs. Eyes of all individuals closely observed were brick red.

Mniotilta varia (Linnaeus). Black and White Warbler. Seen daily April 14 to 24, a female being collected on April 16 (Burleigh).

Vermivora celata (Say). Orange-crowned Warbler. Several noted April 16, not far from Tamazunchale. Not satisfactorily identified otherwise.

Vermivora ruficapilla (Wilson). Nashville Warbler. Noted several times April 18 to 21.

Compothlypis pitiayumi (Vieillot). Pitiayumi Warbler.⁷ Several seen along the Axtla River, April 22. No specimen taken.

Dendroica virens virens (Gmelin). Black-throated Green Warbler. Noted repeatedly April 14 to 22. Male, molting slightly about head, taken April 14 (Burleigh).

Dendroica pensylvanica (Linnaeus). Chestnut-sided Warbler. Male seen in ravine seven miles south of Tamazunchale, April 26 (Sutton).

Seiurus noveboracensis (Gmelin). Northern Water-Thrush. Noted twice along the Axtla River, a single bird April 16, and a single bird April 18.

Seiurus aurocapillus (Linnaeus). Ovenbird. Two seen near Jalpilla, April 18.

⁶ Of the several common names suggested for this species, Spruce-woods Thrush seems to the senior author to be most apt and pleasing. "Buffy-faced Thrush" is descriptive but not euphonious. Many good names that might be given the bird would apply equally well to other species.—G.M.S.

⁷ For *Compothlypis p. pitiayumi* Hellmayr uses the common name 'Olive-backed Warbler' (Birds of the Americas, Pt. 8, 1935: 357). This, it seems to the senior author, is inadequate unless *C. americana* and *C. pitiayumi* are considered conspecific, for both groups are more or less 'olive-backed.' G.M.S.

Basileuterus culicivorus culicivorus (Lichtenstein). Lichtenstein's Warbler. Fairly common in heavier woodlands. One specimen taken, a male, April 27 (Semple).

Basileuterus rufifrons jouyi Ridgway. Jouy's Warbler. Noted infrequently in open and brushy woodlands. Breeding female and male taken respectively on April 25 and 28.

Geothlypis trichas (Linnaeus). Marsh Yellow-throat.⁸ Noted infrequently April 14 to 22, a male being taken on the fourteenth (Burleigh). This specimen was molting extensively about the head, and we prefer not to attempt subspecific determination for the present.

Chamaethlypis poliocephala palpebralis Ridgway. Mirador Yellow-throat. Common locally in weed-grown fields, marshy spots, and along the grassy edges of open woodlands. Males and females taken April 15 to 21 were molting extensively about the head and chest. At Matlapa and Jalpilla, April 18 to 21, males were repeatedly noted singing flight songs and females seen building nests.

Icteria virens (Linnaeus). Yellow-breasted Chat. Several noted along the Axtla River and at Matlapa and Jalpilla, April 22 to 24.

Euthlypis lachrymosa lachrymosa (Bonaparte). Fan-tailed Warbler. Two breeding pairs encountered along wooded ravine seven miles south of Tamazunchale, April 26 to 28. A female taken there on the twenty-sixth was obviously preparing to nest (Sutton).

Wilsonia pusilla Wilson. Wilson's Warbler. A few noted daily April 14 to 19. No specimen taken.

Setophaga ruticilla (Linnaeus). American Redstart. Adult male seen near the Axtla River, April 21.

Icterus gularis (Wagler). Alta Mira Oriole. Abundant. Mated pairs noted repeatedly and several nests found. One of these (April 17) was suspended from a single telephone wire that hung high above a wooded ravine.

Icterus graduacauda graduacauda Lesson. Black-headed Oriole. Not common. A few noted March 27, on which date a male was taken. During April not certainly identified until the twenty-sixth, two mated pairs being seen at that time several miles south of Tamazunchale. Male taken April 28.

Icterus galbula (Linnaeus). Baltimore Oriole. Noted repeatedly April 15 to 19.

Icterus spurius (Linnaeus). Orchard Oriole. Noted several times April 15 to 19, a male being taken on the fifteenth (Burleigh). No indication of its breeding anywhere in the region.

Cassidix mexicanus prosopidicola Lowery. Mesquite Great-tailed Grackle. Common about farmlands and in open country. A breeding male, taken April 16, measures: wing, 198 mm.; tail, 202. A female (April 20) measures: wing, 144; tail, 146.

Dives dives dives (Lichtenstein). Sumichrast's Blackbird. Abundant and noticeable because of its incessant singing, especially in the heavy woodlands along the Axtla River. Breeding specimens taken March 26 and April 21 to 24.

Amblycercus holosericeus holosericeus (Lichtenstein). Prevost's Cacique. Noted first April 22, on a heavily thicketed hillside back from the Axtla River, and along a small stream near Palitla, two females being taken that day. Noted infrequently thereafter until April 28.

Tangavius aeneus aeneus (Wagler). Red-eyed Cowbird. Noted infrequently April 17 to 29. Female specimens, with enlarged ovary, taken April 21 and 23.

⁸ Satisfactory common names for such species as *Geothlypis trichas* are hard to decide upon. 'Yellow-throat' is not adequate because members of the genus *Chamaethlypis* also are 'Yellow-throats.' 'Witchety' would not be bad, if only someone had used it a century or so ago! Since *Geothlypis* is nearly always found about marshes, whereas *Chamaethlypis* often is found in dry fields, the common name Marsh Yellow-throat is offered here. G.M.S.

Piranga ludoviciana (Wilson). Western Tanager. Noted once, a male, along the Axtla River, April 22.

Piranga rubra (Linnaeus). Summer Tanager. Identified with certainty only on April 14, on which date three adult males were seen at Tamazunchale.

Tanagra laeta laeta Bangs and Penard. Bonaparte's Euphonia. Seen repeatedly in small companies or in pairs, April 14 to 20. Two males collected.

Tanagra affinis Lesson. Lesson's Euphonia. Identified with certainty only on April 14, when a male was collected (Sutton).

Thraupis abbas (Lichtenstein). Abbot Tanager. Fairly common, mated pairs being seen daily throughout our stay. A thin-walled nest, found April 25, was situated on a horizontal branch among some small air plants, about 25 feet from the ground, at the edge of an opening in the forest (Sutton).

Habia gutturalis littoralis (Nelson). Tabasco Ant Tanager. Fairly common in thicker woodlands along the Axtla River and near Palitla. Female specimens taken April 19 to 22 are referable to *littoralis* rather than *salvini*, for their throats are buffy ochraceous with an admixture of red rather than "ocher yellow or dull cadmium yellow" (see Ridgway, Birds of North and Middle America, Part 2, 1902: 148). Males taken during the same period compare favorably with either *littoralis* or *salvini*. Thus far we have not been able to discover any constant difference between adult males of these two races.

Rhodothraupis celaeno (Lichtenstein). Crimson-collared Grosbeak. A few were seen April 21 and 22, near the Axtla River, a male being taken on the latter day.

Richmondia cardinalis (Linnaeus). Cardinal. Noted only in brushy woodlands one to two miles north of Tamazunchale, two or three pairs being seen there each time we visited the place. No specimen taken.

Hedymeles ludovicianus (Linnaeus). Rose-breasted Grosbeak. Noted repeatedly April 14 to 29, never more than two or three a day, but in several sorts of woodland. Evidently a common transient or winter visitant.

Guiraca caerulea (Linnaeus). Blue Grosbeak. Noted several times April 21 to 28, in the vicinity of Jalpilla, Matlapa, and Palitla. No specimen taken.

Cyanocompsa parellina parellina (Bonaparte). Blue Bunting. The Blue Bunting presumably nests at Tamazunchale, but we did not procure a specimen that we knew to be breeding. A male and female taken in brushy woodland two miles north of town are too large-billed for *C. p. beneplacita* and, since the male is too dull a blue and the female too rufescent a brown (both above and below) for *C. p. lucida*, we are forced to conclude that they are straight *parellina*. Presumably this is the race that nests in the vicinity.

Cyanocompsa parellina lucida Sutton and Burleigh. Bright Blue Bunting. This recently described race must pass through the Tamazunchale section in migration. A subadult male (April 20) that is noticeably smaller-billed and brighter blue below than the male *parellina* referred to above, and a female (April 22) that is less rufescent brown both above and below than female *parellina* from Veracruz, both represent the present race.

Passerina cyanea (Linnaeus). Indigo Bunting. Noted daily April 14 to 21, especially in the vicinity of Jalpilla.

Passerina ciris (Linnaeus). Painted Bunting. Noted repeatedly April 16 to 24, at Jalpilla, Matlapa, and along the Axtla River.

Tiaris olivacea pusilla Swainson. Mexican Grassquit. Seen throughout our stay, notably April 15 and 16, when large flocks were encountered near Tamazunchale. Male with enlarged testes taken April 16 (Burleigh).

Saltator atriceps atriceps (Lesson). Black-headed Saltator. Common locally and very noticeable because of its noisiness. Especially abundant along the Axtla River, where it was always the first species to respond to our squeaking, from four to a dozen birds following us about wherever we went, scolding incessantly. Male and female specimens taken March 26 and April 19 to 28 exhibit

well the remarkable variation in extent and intensity of chest-band that is characteristic of this form.

Saltator coerulescens grandis (Lichtenstein). Lichtenstein's Saltator. Noted infrequently along the highway between Matlapa and the Axtla River. Male, with testes greatly enlarged, taken not far from the Axtla, April 19 (Sutton).

Sporophila torqueola moreletii (Bonaparte). Morelet's Seedeater. Fairly common in open country. A singing male, taken near Tamazunchale April 16, was molting about the face and throat (Sutton).

Volatinia jacarini splendens (Vieillot). Northern Blue-black Grassquit. Common in open pasturelands not far from Tamazunchale. Flocks of busily feeding birds seen repeatedly from April 23 to the end of our stay. The males indulged in astonishing antics which we assumed to be part of their courtship—quick, complete flip-flops made from dead twigs or from fence wires in the most adroit manner. Males, with testes greatly enlarged, taken April 23 (Sutton).

Arremonops rufivirgatus (Lawrence). Texas Sparrow. Common. Our two specimens (male, April 16; female, April 21) are too large-billed, and too dark both above and below for *A. r. rufivirgatus*. Since they are not big-billed enough nor dark enough on the chest and flanks for *A. r. crassirostris* (Ridgway), they must be called intermediates. The male measures: wing, 65 mm., tail 64; the female: wing, 61, tail, 59.

Atlapetes brunnei-nucha brunnei-nucha (Lafresnaye). Chestnut-capped Atlapetes. Fairly common from four to nine miles up the Moctezuma River from Tamazunchale, on the lower slopes of the mountains. Breeding specimens taken there April 14 to 27.

CORNELL UNIVERSITY, ITHACA, NEW YORK.

ORNITHOLOGICAL NEWS

The Minnesota Ornithologists' Union issued a special number of its official publication, *The Flicker*, in commemoration of the 1940 Wilson Ornithological Club meeting in Minneapolis. An illustration and description of the attractive Calder statue of Alexander Wilson in Philadelphia, an annotated list of the birds named by and for Wilson, and a paper on the different editions of Wilson's American Ornithology make the issue of special interest to collectors of Wilsoniana. In addition there is an historical sketch of the Minnesota Ornithologists' Union and a summary of 1940 Minnesota nesting records. We understand that the editor, Arnold Erickson of the University of Minnesota, University Farm, St. Paul, has a few extra copies of this issue which may be obtained at twenty-five cents each.

By a recent Act of Congress the Barro Colorado Island Biological Laboratory has been put on a permanent basis with government financial support. The island has been set aside as a wildlife reserve under the name of the "Canal Zone Biological Area" and will be administered by a Board made up of three Cabinet officers, the Secretary of the Smithsonian Institution, the president of the National Academy of Science, and three "distinguished biologists." The three biologists on the present board include two ornithologists, Thomas Barbour and Alexander Wetmore.

On December 20 the American Geographical Society presented the Cullum Geographical Medal for 1940 to Robert Cushman Murphy.

Guy Emerson has been elected President of the National Audubon Society (formerly known as the National Association of Audubon Societies).

Frederick H. Test is now Instructor in the University of Michigan Department of Zoology.