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BIRDS OF LINARES AND GALEANA,
NUEVO LEÓN, MEXICO

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The senior author first saw Linares, Nuevo León in the spring of 1938 when, on February 15 and March 5, he motored through the city. The following year he made an overnight stop there March 22, collecting a few specimens along the Río Pablillo, near the town. These have been reported on briefly (Sutton and Burleigh, 1941).

In the spring of 1941 the Cornell University—Carleton College Expedition gave their undivided attention to the bird life of this district for several days. The four-man party established headquarters at Linares on the evening of February 27, remaining there until March 7, when Robert B. Lea and Dwain W. Warner undertook a seven-day side-investigation at Galeana. Sutton and Pettingill continued at Linares until the morning of March 9, on which date they left for Gomez Farias, Tamaulipas. On May 4 and 5, *en route* northward to the United States, they listed the birds at Linares proper as well as they could with the brief time at their disposal.

LINARES

Linares is at the western edge of the coastal plain. Its elevation is said to be about 1,400 feet. The countryside is flat, semi-arid, rather monotonous. Along such rivers as the Pablillo and Camacho, fine trees may grow, but the uncultivated districts back from water are sparsely covered brushlands, and the bird life in this sort of country does not differ markedly from that of southern Texas.

Sixteen miles southwest of Linares the Galeana road enters the mountains. Following this road the authors made several trips up Juarez Canyon,

finding the bird life of the well-wooded slopes to be strikingly different from that of the flat country to the east. Certain montane forms such as the Couch Jay were, at this season, common even in the lowest of the foothills.

The weather was changeful. February 27 and 28 were gray and drizzly. During the rest of the period there was some bright sunshine part of each day, but the mornings usually were misty or foggy (especially among the foothills) and only rarely was the whole sky clear.

GALEANA

Forty-three miles west of Linares, at the end of a tortuous, unimproved road, sprawls the old stone and adobe town of Galeana. Here, at an elevation of over 6,000 feet, the visitor is impressed with the treelessness of the mountains that encircle the broad valley; the semi-arid character of the countryside; the orchards that thrive where irrigation is possible.

To the south stands an extensive pine wood. Since there is virtually no undergrowth, this forest presents the appearance of a neatly trimmed park. Three miles to the west of Galeana there is a good-sized lake where, surprisingly enough, only a few thin clumps of cattail line the shore. Along the streams grow small willows and other shrubby trees. Twelve miles to the northwest the highest point in Nuevo León, Cerro Potosí, rises to an elevation of over 12,000 feet.

According to Muller (1939:708-9) Galeana is "just east of a low divide which cuts it off from the desert plateau. The climate . . . is also much influenced by the proximity of mountains which increase the rainfall in spite of the typical plateau topography of the immediate vicinity and the altitude which approximates that of the plateau." According to this author Linares receives considerably more rainfall month by month than Galeana, save in July and August. During these two months there is some precipitation on 8.8 and 6.8 days, respectively, at Galeana, as against the 8 and 5.7 days for Linares.

Lea and Warner were afield at Galeana from March 7 to 14. During their stay the peach and apple orchards came into full bloom and the odors of spring filled the air despite the ice that nightly formed on quiet pools. Two trips (March 9 and 11) were made to the lake 3 miles west of town.

The following list is based largely on specimens collected. The identification work was done by the senior author who was ably assisted by Lea, Warner, and another of his graduate students, Allan R. Phillips. The authors are grateful to Mr. James L. Peters for his comments on certain

Ciccaba virgata and *Cyanocompsa parellina* specimens; and to Mr. L. Irby Davis, of Harlingen, Texas, for his critical reading of the manuscript. All specimens save those returned to the Mexican government have been incorporated with the Louis Agassiz Fuertes Memorial Bird Collection at Cornell University.

LIST OF SPECIES

Family COLYMBIDAE

COLYMBUS NIGRICOLLIS CALIFORNICUS (HEERMANN). EARED GREBE. A loose flock of about a hundred small grebes was seen on the lake 3 miles west of Galeana, March 11. The only specimen taken proves to be a female of the present form (Lea). It is in full winter plumage.

Family ARDEIDAE

ARDEA HERODIAS LINNAEUS. GREAT BLUE HERON. One seen along the Río Camacho, 4 miles southwest of Linares, March 5.

NYCTICORAX NYCTICORAX (LINNAEUS). BLACK-CROWNED NIGHT HERON. Night Herons were noted by day as well as at night along the Río Pablillo near Linares, March 3 and 4. A clearly marked inner primary found at the water's edge proved to belong to the present species.

Family ANATIDAE

QUERQUEDULA CYANOPTERA (VIEILLOT). CINNAMON TEAL. Several teal seen at the lake 3 miles west of Galeana, March 9. Adult male of present species taken that day (Warner).

SPATULA CLYPEATA (LINNAEUS). SHOVELLER. Several noted at lake 3 miles west of Galeana March 9 and 11. Immature male in mixed plumage collected there on the 9th (Lea).

NYROCA VALISINERIA (WILSON). CANVASBACK. Male in nuptial plumage taken at lake near Galeana, March 11 (Lea).

NYROCA AMERICANA (EYTON). REDHEAD. Adult male seen clearly at lake near Galeana, March 9.

NYROCA AFFINIS (EYTON). LESSER SCAUP. Male in breeding plumage taken at lake near Galeana, March 11 (Warner).

CHARITONETTA ALBEOLA (LINNAEUS). BUFFLEHEAD. Female taken at lake near Galeana, March 9 (Warner).

OXYURA JAMAICENSIS RUBIDA (WILSON). RUDDY DUCK. Noted at lake near Galeana, March 9 and 11. Male in mixed plumage taken there March 9 (Lea).

Family ACCIPITRIDAE

CATHARTES AURA (LINNAEUS). TURKEY VULTURE. Seen daily at Linares. A sleeping bird noted early in the morning, March 1, appeared to have its head tucked completely under its scapulars. Not seen at Galeana.

CORAGYPUS ATRATUS (BECHSTEIN). BLACK VULTURE. Abundant at Linares. Company of thirty roosted in a dead tree at the edge of town, February 28-March 9. Not seen at Galeana.

ACCIPITER STRIATUS VELOX (WILSON). EASTERN SHARP-SHINNED HAWK. Noted several times in brushland about Linares. An immature male taken there March 3 exactly matches specimens from various points in the eastern United States.

ACCIPITER COOPERII (BONAPARTE). COOPER HAWK. Two or three noted daily in large trees along the Río Pablillo near Linares.

BUTEO JAMAICENSIS (GMELIN). RED-TAILED HAWK. Noted several times at Linares. February 28-March 7. An immature bird flew into camp on the morning of March 1, gorged on an opossum carcass, and spent the day half asleep in a tree close by. Adult seen along arroyo 2 miles south of Galeana, March 13.

BUTEO MAGNIROSTRIS GRISEOCAUDA (RIDGWAY). GRAY-TAILED HAWK. Fairly common about Linares. Two females taken, one (March 4) a sub-adult bird with heavily streaked chest, the other (March 6) fully adult.

PARABUTEO UNICINCTUS (TEMMINCK). HARRIS HAWK. One seen March 9, 10 miles south of Linares, as it flew in to investigate a company of feeding vultures.

ASTURINA NITIDA (LATHAM). MEXICAN GOSHAWK. Single bird noted 14 miles southwest of Linares along Galeana road, February 28, and another single bird along Río Camacho, not far from Linares, March 3.

CIRCUS CYANEUS (LINNAEUS). MARSH HAWK. Noted infrequently in flat country about Linares, February 28-March 7.

Family FALCONIDAE

POLYBORUS CHERIWAY (JACQUIN). AUDUBON CARACARA. A few noted daily about Linares. Not common, however.

FALCO MEXICANUS SCHLEGEL. PRAIRIE FALCON. Single bird noted March 7 circling about cliffs east of Galeana (Sutton) and another on March 10, 4½ miles southwest of Galeana (Warner).

FALCO PEREGRINUS ANATUM BONAPARTE. DUCK HAWK. At nightfall on March 2, at Linares, a strong-flying hawk was seen to capture a bat, fly to a leafless tree, and tear up its prey. Since it could not be identified in the semi-darkness, it was collected. It proved to be an immature female Duck Hawk. In its crop and stomach were found the remains of three Free-tailed Bats (*Tadarida*).

FALCO SPARVERIUS SPARVERIUS LINNAEUS. AMERICAN SPARROW HAWK. Seen several times in open country about Linares, where a male was taken March 4 (wing, 187 mm.). Noted but once at Galeana: a worn male taken March 13 (wing, 181). The under parts of this specimen are lightly spotted and the back and scapulars are only slightly barred.

Family CRACIDAE

ORTALIS VETULA (WAGLER). CHACHALACA. Fairly common at Linares, especially in the thick brush along the Río Camacho. Not seen in Juarez Canyon or anywhere about Galeana.

Family PHASIANIDAE

CALLIPEPLA SQUAMATA SQUAMATA (VIGORS). MEXICAN SCALED QUAIL. Coveys noted about clumps of prickly-pear cactus north and east of Galeana. A male taken by Warner March 12 is noticeably darker gray on the chest, neck, and upper back than freshly plumaged, virtually topotypical *C. s. pallida* from Sulphur Springs Valley, Arizona. Not seen anywhere about Linares.

Family RALLIDAE

FULICA AMERICANA GMELIN. AMERICAN COOT. Common at lake 3 miles west of Galeana, March 9 and 11.

Family CHARADRIIDAE

CHARADRIUS VOCIFERUS VOCIFERUS LINNAEUS. NORTHERN KILLDEER. Noted at Linares, March 1. Eight seen at lake 3 miles west of Galeana, March 8. A male taken from this flock belongs to the nominate subspecies (wing, 157 mm., tail, 92).

ACTITIS MACULARIA (LINNAEUS). SPOTTED SANDPIPER. One to four seen daily at Linares, February 28-March 9. Two males taken along the Camacho, March 2-4, are in almost complete winter plumage, the specimen last taken being slightly spotted on the flanks. Not seen at Galeana.

EROLIA MINUTILLA (VIEILLOT). LEAST SANDPIPER. Several small 'peeps' were noted at the lake 3 miles west of Galeana March 8. The only specimen taken was a male of the present species (Warner).

Family COLUMBIDAE

COLUMBA FLAVIROSTRIS WAGLER. RED-BILLED PIGEON. Noted daily February 28-March 9 and May 4-5 at Linares.

COLUMBA FASCIATA SAY. BAND-TAILED PIGEON. Large flocks seen in Juarez Canyon near Iturbide, about half-way between Linares and Galeana, March 8 (Sutton).

ZENAUDURA MACROURA (LINNAEUS). MOURNING DOVE. Not common at Galeana. Two to five birds seen daily, in drier sections as well as in irrigated districts. A male taken by Lea on March 11 is small for *Z. m. marginella* (wing, 146 mm.; tail molting), but it is noticeably grayer above and somewhat paler beneath than any eastern bird (New York, Georgia, etc.) in the series at hand. Fairly common in open country southwest of Linares.

SCARDAFELLA INCA (LESSON). INCA DOVE. Common both at Linares and at Galeana. The testes of a male taken March 12 at the latter place measured 4 x 7 mm.

COLUMBIGALLINA PASSERINA PALLESCENS (BAIRD). MEXICAN GROUND DOVE. Common about Linares on farms and along roads. Female (ovary slightly enlarged) taken March 2.

LEPTOTILA VERREAUXI ANGELICA BANGS AND PENARD. WHITE-FRONTED DOVE. Not noted about Linares proper, but seen repeatedly in foothills 14 miles to southwest. Breeding males taken in that district February 28-March 2.

Family PSITTACIDAE

ARA MILITARIS (LINNAEUS). MILITARY MACAW. Not recorded at Linares by the Cornell-Carleton expedition in 1941 nor by the Semple expeditions in 1938 and 1939, but Mr. L. Irby Davis informs the senior author in personal letter that he has seen large flocks in the district on several occasions.

ARATINGA HOLOCHLORA (SCLATER). GREEN PARAKEET. Common May 4 and 5 at Linares, flocks of 50 to 100 birds being noted about the big trees along the Río Pablillo. An injured bird was picked up May 3.

AMAZONA VIRIDIGENALIS (CASSIN). RED-CROWNED PARROT. Irregular in occurrence. The Semple Expedition of 1938 did not record it north of Victoria, Tamaulipas; but in 1939 a large flock was seen at Linares, March 22 (Sutton and Burleigh, 1941: 159). In 1941 a flock of 5 was seen several times flying along the Río Pablillo, March 7, but the species was not noted otherwise that year.

Family CUCULIDAE

GEOCOCCYX CALIFORNIANUS (LESSON). ROAD-RUNNER. Noted infrequently March 4-9, at Linares.

Family STRIGIDAE

OTUS ASIO (LINNAEUS). SCREECH OWL. A Screech Owl taken by the senior author at Linares on March 22, 1939 was reported as "not so dark on the crown" as a gray-phased *O. a. semplei* from the Mesa de Chipinque, Nuevo León (Sutton and Burleigh, 1941:159). In 1941 three more gray-phased specimens, two males and a female, were collected near Linares,

March 4-6. These are quite uniform, none of them showing any admixture of the red phase. They are darker throughout the upper parts than topotypical *O. a. mcallii* and probably are intermediate between that race and *semplei*.

BUBO VIRGINIANUS MAYENSIS NELSON. MAYAN HORNED OWL. Noted several times at Linares March 3-7. A male specimen (wing, 318 mm.) found dead on the main highway a few miles south of Linares on March 23, 1939, has been identified as *B. v. mayensis* (Sutton and Burleigh, 1941:159).

GLAUCIDIUM BRASILIANUM RIDGWAYI SHARPE. FERRUGINOUS PYGMY OWL. Recorded infrequently at Linares March 5-7. Male taken by Warner along the Río Camacho, 3 miles southwest of town, March 5.

SPEOTYTO CUNICULARIA (MOLINA). BURROWING OWL. One seen daily near Linares, March 3-8.

CICCABA VIRGATA TAMAULIPENSIS (PHILLIPS). TAMAULIPAS WOOD OWL. A male taken March 3 (Lea) and a female taken the following day (Sutton) in thick woodland along the Camacho 3 miles southwest of Linares, have been directly compared with the type of *C. v. tamaulipensis* by Mr. J. L. Peters, who pronounces them both to belong to this race, the male being "more typical than the female." So far as we have been able to determine this owl has not heretofore been taken in the State of Nuevo León (see Peters, 1940: 153) and the two above-mentioned records may well be the northermost for the species and genus.

Family CAPRIMULGIDAE

CHORDEILES MINOR (J. R. FORSTER). NIGHTHAWK. Several seen and heard above the Río Pablillo, near Linares, May 4.

NYCTIDROMUS ALBICOLLIS (GMELIN). PAURAUQUE. One heard calling at dusk, March 3, near Linares.

Family TROCHILIDAE

ARCHILOCHUS ALEXANDRI (BOURCIER AND MULSANT). BLACK-CHINNED HUMMINGBIRD. Recorded only at Linares, where two males were noted about a flowering orange tree, March 1, and a single male was seen March 6.

AMAZILIA YUCATANENSIS CHALCONOTA OBERHOLSER. BUFF-BELLIED HUMMINGBIRD. Noted several times among large trees along the Río Pablillo near Linares, February 28-March 9. Female taken February 28.

CYNANTHUS LATIROSTRIS LATIROSTRIS SWAINSON. MEXICAN BROAD-BILLED HUMMINGBIRD. Noted at Linares, Galeana, and at various points between the two towns. Four males taken March 1-13 are too long-winged (53, 54, 54, 55 mm.) and too gray on the posterior under parts for *C. l. magicus* of Arizona and northwestern Mexico (See Moore, 1939:314).

Family TROGONIDAE

TROGON AMBIGUUS AMBIGUUS GOULD. COPPERY-TAILED TROGON. Noted infrequently in thicker woodland along the Camacho near Linares March 4-6. Female taken March 4 (Lea).

Family ALCEDINIDAE

MEGACERYLE TORQUATA TORQUATA (LINNAEUS). RINGED KINGFISHER. Infrequently seen near Linares March 4-9. Male taken March 4, along the Río Camacho (Lea).

CHLOROCERYLE AMERICANA SEPTENTRIONALIS (SHARPE). TEXAS KINGFISHER. Seen frequently near Linares. Male and female taken along the Río Camacho, 3 miles southwest of town, March 3-4.

Family PICIDAE

COLAPTES CAFER NANUS GRISCOM. DWARF RED-SHAFTED FLICKER. Noted several times at Galeana. Two males and a female taken there March 7-8 are quite uniform in size and color, the breast- and belly-spotting of the female being finer than that of the males. All three specimens are so small (wing, 147, 146, 147 mm.; tail, 101, 98, 99; culmen, 35, 36, 35) and so slender-billed that they cannot be called anything but *nanus*. The testes of the March 7 male measured 6.5 x 4.5. No Flicker was seen at Linares.

CEOPHLOEUS LINEATUS PETERSI VAN ROSSEM. NORTHERN LINEATED WOODPECKER. Noted at Linares by the senior author's party March 22-23, 1939 (Sutton and Burleigh, 1941: 159). In 1941 seen there infrequently February 28-March 7. Male (wing, 184 mm., tail, 118, culmen 38.5) taken March 1 (Warner). The name *petersi*, bestowed on the large northeastern race by van Rossem, replaces *leucopterylus* of Reichenbach, the type of the latter being an example of *Ceophloeus erythroptus* (van Rossem, 1934:11).

CENTURUS AURIFRONS AURIFRONS (WAGLER). GOLDEN-FRONTED WOODPECKER. Fairly common in big trees along streams near Linares. Female taken March 1.

BALANOSPHYRA FORMICIVORA FORMICIVORA (SWAINSON). MEXICAN ACORN-STORING WOODPECKER. Female taken by Sutton in deep canyon below Iturbide, March 8. Another seen flying high over mountain that day at same place. Not noted anywhere in the immediate vicinity of Galeana, and not seen at Linares. The above-mentioned specimen has a noticeable spot of red on the chest.

SPHYRAPICUS VARIUS VARIUS (LINNAEUS). YELLOW-BELLIED SAPSUCKER. Noted repeatedly at Linares February 28-March 9. Female (wing, 126 mm.) with sprinkling of red in crown taken there March 2 (Pettingill). Female (wing, 125) taken March 10, at Galeana (Warner).

DRYOBATES SCALARIS (WAGLER). LADDER-BACKED WOODPECKER. Common both at Galeana and at Linares. A male and female (wing, 98, 102 mm. respectively) taken at Linares on March 3 are indistinguishable from freshly plumaged southeastern Texas *symplectus*. A female (wing, 99) taken March 7 at Galeana, however, shows some approach to *cactophilus* in the rather heavy black barring of the back and outer rectrices.

Family COTINGIDAE

PLATYPSARIS AGLAIAE GRAVIS VAN ROSSEM. NORTHEASTERN ROSE-THROATED BECARD. Fairly common in heavier woodland near Linares. Pair with nest about 60 feet from ground observed May 4-5, on bank of Río Pablillo. Specimens collected March 1-6 measure: males, wing 95.5 mm., 96, 93; tail, 76, 73, 76; females, wing, 90.5, 94; tail, 69.5, 74. One male is much blacker on the back and noticeably darker throughout the under parts than the other two.

Family TYRANNIDAE

TYRANNUS MELANCHOLICUS COUCHII BAIRD. COUCH KINGBIRD Fairly common at Linares. Male (wing, 124 mm., tail, 109), taken there March 5 (Warner).

TYRANNUS VOCIFERANS SWAINSON. CASSIN KINGBIRD. Fairly common about irrigated fields and orchards at Galeana. Male taken March 8 (Lea).

PITANGUS SULPHURATUS (LINNAEUS). DERBY FLYCATCHER. Fairly common at Linares, several pairs being encountered there February 28-March 9.

MYIODYNASTES LUTEIVENTRIS SCLATER. SULPHUR-BELLIED FLYCATCHER. One seen along Río Pablillo, near Linares, May 4.

SAYORNIS PHOEBE (LATHAM). EASTERN PHOEBE. Noted daily February 28 (male taken) to March 9, at Linares.

SAYORNIS NIGRICANS NIGRICANS SWAINSON. NORTHERN BLACK PHOEBE Noted repeatedly in Galeana district. A male (testes somewhat enlarged) taken there by Lea, March 12, has pure white under tail coverts.

SAYORNIS SAYA SAYA (BONAPARTE). SAY PHOEBE. Noted daily at Galeana. Two specimens taken there March 7-8, are among the palest in the considerable series of United States and Canadian specimens at hand, and their tail-length (male, 80 mm.; female, 81) is well below that of average *yukonensis* ("3.39 in." = 86.1 mm.) according to Bishop's original description of that race (however, see Swarth, 1926: 45).

EMPIDONAX HAMMONDII (XANTUS). HAMMOND FLYCATCHER. Molting bird (sex uncertain) taken in foothills 15 miles southwest of Linares, March 5 (Sutton). The distinctly notched tail of this specimen measures 58 mm.

EMPIDONAX WRIGHTII BAIRD. WRIGHT FLYCATCHER. Female taken in foothills 14 miles southwest of Linares, March 2 (Warner).

EMPIDONAX GRISEUS BREWSTER. GRAY FLYCATCHER. Male (molting about chin and throat) taken 2 miles west of Galeana, March 8 (Lea).

PYROCEPHALUS RUBINUS MEXICANUS SCLATER. MEXICAN VERMILION FLYCATCHER. Male in high plumage taken 1 mile south of Galeana, March 13 (Lea). Two bright males seen at edge of foothills 14 miles southwest of Linares, March 2.

CAMPTOSTOMA IMBERBE IMBERBE SCLATER. EASTERN BEARDLESS FLYCATCHER. Seen infrequently at Linares. A male and female taken in brushland southwest of town March 2-5 are distinctly shorter-billed than a topotypical specimen of *C. i. ridgwayi* at hand.

Family ALAUDIDAE

OTOCORIS ALPESTRIS (LINNAEUS). HORNED LARK. Small flocks seen in dry country southwest of Galeana March 9 and 11. Not seen at Linares.

Family HIRUNDINIDAE

TACHYCINETA THALASSINA (SWAINSON). VIOLET-GREEN SWALLOW. Large flock seen feeding about lake near Galeana, March 9 and 11. Of two males taken there March 9, the larger (wing, 119 mm.) is purple-backed, has virtually pure bronzy-green upper tail coverts, and is identifiable as the Mexican race, *T. t. thalassina*, though it is smaller than the three birds measured by Ridgway; while the smaller (wing, 115) is green-backed by comparison, has green rump and dark blue-green upper tail coverts and, since it almost perfectly matches a breeding bird from the Santa Rita Mountains, Arizona, may properly be called *T. t. lepida*. Sound assumptions are that the former represents a Galeana breeding population intermediate between the nominate race and *lepida*; that the latter was a transient.

STELGIDOPTERYX RUFICOLLIS (VIEILLOT). ROUGH-WINGED SWALLOW. Several seen circling about irrigation ditch at Linares, March 4-6.

Family CORVIDAE

APHELOCOMA SORDIDA COUCHII (BAIRD). COUCH JAY. Common in mountains from Galeana eastward to the base of the foothills, reaching a point only 14 or 15 miles west of Linares at this season. Probably withdraws into the higher mountains to nest. Male and female taken 15 miles southwest of Linares, February 28 (Sutton). Female taken 3 miles south of Galeana, March 13 (Warner).

XANTHOURA LUXUOSA LUXUOSA (LESSON). GREEN JAY. Fairly common in brushy woodland at Linares. A female (wing, 113 mm., tail, 123) taken March 3 is noticeably brighter throughout than four topotypical examples of *X. l. glaucescens* in the Cornell University collection.

CORVUS CRYPTOLEUCUS COUCH. WHITE-NECKED RAVEN. Hundreds seen flying southwestward over Linares, as if toward some roost in the foothills, each evening, March 1-9.

CORVUS IMPARATUS PETERS. MEXICAN CROW. Fairly common about Linares, especially along the Río Pabillo. Linares is at the northern edge of the species' range (see Sutton and Burleigh, 1941:159).

PSILORHINUS MORIO (WAGLER). BROWN JAY. Common at Linares. Flocks seen there daily March 1-9, and May 4-5. Not seen at Galeana.

Family PARIDAE

PARUS ATRICRISTATUS ATRICRISTATUS (CASSIN). BLACK-CRESTED TIT-MOUSE. Common at Linares. Two males (March 22, 1939, Thomas D. Burleigh; March 1, 1941, Sutton) measure: wing, 72 mm., 70; tail, 63, 65.

Family TROGLODYTIDAE

TROGLODYTES DOMESTICUS PARKMANII AUDUBON. WESTERN HOUSE WREN. Male taken at Linares, March 1 (Sutton); and at Galeana, March 10 (Lea).

THRYOMANES BEWICKII (AUDUBON). BEWICK WREN. Two males taken near Galeana March 8-10 measure: wing, 58, 59 mm., tail, 60, 61, culmen, 16, 16. They are too white below and gray above for *T. b. cryptus*, are somewhat too large for *T. b. eremophilus*, and the heavy barring of the under tail coverts bespeaks close affinity with *T. b. murinus*. They are not so dark-backed as a good example of this race from Tizayuca, State of Mexico (forty miles north of Mexico City), however, so they may be called intermediate between *murinus* and *eremophilus*, closer to the former.

THRYOTHORUS LUDOVICIANUS BERLANDIERI BAIRD. BERLANDIER WREN. Common at Linares, where two males and a female were taken February 28 - March 3. Brood of five young just out of nest seen there May 4.

THRYOTHORUS MACULIPECTUS MICROSTICTUS (GRISCOM). TAMAULIPAS SPOTTED-BREASTED WREN. Not noted in flat country about Linares, but seen repeatedly in foothills 14 miles to the southwest where a female (ovary unenlarged) was taken March 2 (Sutton). *Thryothorus maculipectus* apparently has not heretofore been recorded from Nuevo León.

HELEODYTES BRUNNEICAPILLUS COUESI (SHARPE). NORTHERN CACTUS WREN. Common in open country near Galeana. Two females taken there, March 7-13.

TELMATODYTES PALUSTRIS PLESIIUS (OBERHOLSER). WESTERN LONG-BILLED MARSH WREN. A male (wing, 54 mm., tail, 47) in good plumage taken by Warner at edge of lake near Galeana, March 9, is noticeably paler than a considerable series of *T. p. iliacus* at hand, having no black whatever on the crown. It is brighter than three spring female *plesius* from Brewster County, Texas.

CATHERPES MEXICANUS (SWAINSON). CANYON WREN. Fairly common in mountains southwest of Linares, especially about Iturbide, but not seen at Galeana proper. A female (wing, 62 mm., tail, 54) taken March 8 matches closely in color a male taken at the Mesa del Chipinque, near Monterrey, Nuevo León, on February 11, 1938 (GMS 7983). Like that specimen it is intermediate between *C. m. mexicanus* and *C. m. albifrons*.

SALPINCTES OBSOLETUS OBSOLETUS (SAY). NORTHERN ROCK WREN. One of the commonest birds at Galeana. Noted also in Juarez Canyon, but not in the flat country about Linares. Several specimens taken March 7-13.

Family MIMIDAE

MIMUS POLYGLOTTOS LEUCOPTERUS (VIGORS). WESTERN MOCKINGBIRD. Common at Linares. Two females taken March 3-6 measure: wing, 107 mm., 103; tail, 115.5, 110. Not seen at Galeana.

DUMETELLA CAROLINENSIS (LINNAEUS). CATBIRD. One noted several times in thicket 14 miles southwest of Linares, February 28 and March 2.

TOXOSTOMA LONGIROSTRE SENNETTI (RIDGWAY). SENNETT LONG-BILLED THRASHER. Fairly common at Linares. One (sex?) taken 14 miles southwest of town on February 28 is quite gray on the forehead and cheeks (wing, 95 mm., tail, 124, culmen 28.5).

TOXOSTOMA CURVIROSTRE CELSUM MOORE. PLATEAU CURVE-BILLED THRASHER. A female taken at Galeana by Lea on March 12 is very large (wing, 114 mm., tail, 114); the under parts are heavily marked; the belly is strongly suffused with buff; and the upper parts are darker than in several *T. c. curvirostre* at hand. Judging from statements in the original description (Moore, 1941: 212) the present record marks a notable eastward extension of range for *celsum*.

Family TURDIDAE

TURDUS GRAYI TAMAULIPENSIS (NELSON). TAMAULIPAS GRAY ROBIN. Noted repeatedly among big trees along the Río Pablillo at Linares. Male taken February 28. Pair with nest noted May 4 and 5.

HYLOCICHLA GUTTATA OROMELA OBERHOLSER. CASCADE HERMIT THRUSH. Two males taken at Linares February 28-March 6 have the measurements (wing 91 mm., 89; tail, 69.5, 71), small bill, grayish upper parts, and distinctly gray sides and flanks of this race.

SIALIA MEXICANA MEXICANA SWAINSON. MEXICAN BLUEBIRD. Two males seen 5 miles southwest of Galeana, March 10. One of these (wing, 113 mm., tail, 73, upper parts without a trace of brown) was collected (Lea).

MYADESTES OBSCURUS LAFRESNAYE. BROWN-BACKED SOLITAIRE. One heard and seen in foothills 15 miles southwest of Linares, March 5.

Family SYLVIIDAE

POLIOPTILA CAERULEA (LINNAEUS). BLUE-GRAY GNATCATCHER. Not seen at Galeana. Molting male (testes slightly enlarged) of the eastern race, *P. c. caerulea*, taken near Linares, March 1. Male of *P. c. amoenissima*, supposedly the breeding bird of the mountains, taken near Iturbide, March 8. This specimen (wing, 50 mm., tail, 49) is not as dark, either above or below, as breeding birds from Jacala, Hidalgo. A bit of the black basal portion of the outermost rectrices is visible without moving the under tail coverts.

CORTHYLIO CALENDULA CALENDULA (LINNAEUS). EASTERN RUBY-CROWNED KINGLET. Seen frequently at Linares February 28-March 6. Male (wing, 60.5 mm., tail, 47) taken 2 miles west of Galeana, March 8.

Family MOTACILLIDAE

ANTHUS RUBESCENS (TUNSTALL). PIPIT. A male taken near Galeana, March 9 (Lea) is in mixed plumage, the incoming tertials being much darker than the faded and worn secondaries, and the under parts having a blotched appearance (wing, 85 mm., tail, 67).

Family BOMBYCILLIDAE

BOMBYCILLA CEDRORUM VIELLOT. CEDAR WAXWING. Large flocks noted near Linares, March 1-4.

Family PTILOGONATIDAE

PHAINOPEPLA NITENS NITENS (SWAINSON). MEXICAN PHAINOPEPLA. A male and female taken at Galeana March 10-13 represent this southward-ranging race. the former specimen measuring: wing, 97 mm., tail, 101; the latter, wing, 96, tail, 100.

Family LANIIDAE

LANIUS LUDOVICIANUS EXCUBITORIDES SWAINSON. WHITE-RUMPED LOGGERHEAD SHRIKE. Fairly common in open country. A male taken at Linares, March 5, is too light-backed for *mexicanus* (though the bill is small), and too short-tailed (93 mm.) for *sonoriensis*. Furthermore there is virtually no black on the outer rectrices. A male taken at Galeana, March 8, likewise is too short-tailed (97.5 mm.) for *sonoriensis*; is very pale above; and the black band on the inner web of the outermost rectrix is about 20 mm. wide. These birds probably were wintering, since their testes were only slightly enlarged.

Family VIREONIDAE

VIREO GRISEUS MICRUS NELSON. SMALL WHITE-EYED VIREO. Common at Linares. Four males (all with much enlarged testes) taken March 1-6 measure as follows: wing, 56 mm., 57.5, 55.5, 55; tail, 48, 48, 46, 48.5.

VIREO HUTTONI STEPHENSI BREWSTER. STEPHENS VIREO. Female (wing, 67 mm., tail 52) taken 4 miles southwest of Galeana, March 11 (Lea). This bird is wholly unlike a male and female *V. b. mexicanus* taken February 11, 1938, at the Mesa del Chipinque, near Monterrey, Nuevo León, in being gray rather than olive throughout the upper parts. It is, furthermore, noticeably lighter both above and below than topotypical *V. b. carolinae* and a male and female of this race from Diamante Pass, near Saltillo, Coahuila. Though it is hardly likely that Arizona birds winter regularly so far to the eastward of their nesting grounds, this specimen can be placed only as *V. b. stephensi*.

VIREO SOLITARIUS SOLITARIUS (WILSON). BLUE-HEADED VIREO. Noted frequently at Linares, February 28-March 9. Female (wing, 71.5 mm., tail, 53) taken along Río Pablillo, February 28 (Pettingill).

Family COMPSOTHYLPIDAE

MNIOTILTA VARIA (LINNAEUS). BLACK AND WHITE WARBLER. Noted repeatedly at Linares, February 28-March 9. Most birds seen were molting.

VERMIVORA CELATA (SAY). ORANGE-CROWNED WARBLER. Noted repeatedly February 28-March 10. A male (wing, 58 mm.) taken at Linares, March 4, is far too gray-faced for any but the eastern race. It is very gray-throated in comparison with May birds from Ithaca, New York, hence may not have completed the prenuptial molt. At Galeana two males were taken. The former of these (March 7) is larger (wing, 66) and much more yellow on the throat than the latter (March 10; wing, 61.5). These represent, respectively, the races *V. c. orestera* and *V. c. celata*.

VERMIVORA RUFICAPILLA (WILSON). NASHVILLE WARBLER. Noted February 28 (one at Linares; one in foothills 14 miles to southwest) and March 5 (three molting birds noted in foothills 15 miles to southwest).

COMPSOTHYLPIS PITLAYUMI NIGRILORA (COUES). SENNETT WARBLER. Fairly common at Linares, especially along Río Camacho. Males (testes somewhat enlarged) taken there March 1-4.

DENDROICA CORONATA (LINNAEUS). MYRTLE WARBLER. Common. Two males taken at Linares, March 3, are in their prenuptial molt. The larger of these (wing 75.5 mm., tail, 61) may be called *D. c. hooveri*, the smaller (wing, 74, tail, 58.5), an intermediate between *hooveri* and the well-known eastern race. A Galeana specimen (March 10; wing, 73.5) also is intermediate. All three birds are slightly grayer on the back than young Myrtle Warblers from the eastern United States.

DENDROICA AUDUBONI (TOWNSEND). AUDUBON WARBLER. Common. A male taken at Linares, March 3, is largely in winter plumage. Its measurements (wing, 80 mm., tail, 62.5) indicate the Rocky Mountain race, *D. a. memorabilis*. A male *D. a. auduboni* taken March 10, at Galeana, is considerably smaller (wing, 75.5, tail, 56).

DENDROICA VIRENS VIRENS (GMELIN). BLACK-THROATED GREEN WARBLER. Molting birds seen several times about Linares March 4-7. Male taken along the Río Camacho, 3 miles southwest of town, March 4.

GEOTHLYPIS TRICHAS OCCIDENTALIS BREWSTER. WESTERN YELLOW-THROAT. A male (wing, 58 mm., tail, 55) taken in small clump of cat-tails at edge of lake near Galeana, March 9.

WILSONIA PUSILLA PILEOLATA (PALLAS). PILEOLATED WILSON WARBLER. Noted February 25-March 9 at Linares. Two males, taken February 28-March 3, are bright yellow below and on the face, and strongly yellow-green above. They measure: wing 58 mm., 55; tail, 50.5, 50.

SETOPHAGA PICTA PICTA SWAINSON. PAINTED REDSTART. Two females taken March 4-5, the former in low country 4 miles southwest of Linares, the latter among oak-covered foothills farther west and at considerably greater elevation. In both these specimens the third rectrix is broadly tipped with white.

BASILEUTERUS RUFIFRONS JOUYI RIDGWAY. JOUYI RUFIOUS-CAPPED WARBLER. Common in foothills 14 miles southwest of Linares. Several breeding specimens (gonads greatly enlarged) taken there February 28-March 2. Males sang loudly during this period.

Family PLOCEIDAE

PASSER DOMESTICUS (LINNAEUS). HOUSE SPARROW. Fairly common about Linares. Not seen at Galeana.

Family ICTERIDAE

STURNELLA NEGLECTA AUDUBON. WESTERN MEADOWLARK. Fairly common at Galeana where a female was taken March 7, 2 miles north of town. Noted once near Linares—a flock of about fifteen, March 1.

ICTERUS GRADUACAUDA AUDUBONII GIRAUD. AUDUBON BLACK-HEADED ORIOLE. Common at Linares February 28-March 9, males (testes somewhat enlarged) being collected during this period. Less common in May, two mated pairs being noted May 4 in trees where small flocks had been seen in early March.

ICTERUS CUCULLATUS CUCULLATUS SWAINSON. HOODED ORIOLE. Noted several times at Linares. An adult male (testes slightly enlarged) taken March 5 is very long-winged (90 mm.)

ICTERUS GULARIS TAMAULIPENSIS RIDGWAY. ALTA MIRA ORIOLE. Two adult males seen and female (ovary not enlarged) collected along Río Camacho near Linares, March 5.

EUPHAGUS CYANOCEPHALUS (WAGLER). BREWER BLACKBIRD. Large flock (mostly, if not all, males) seen in streets of Linares, March 7.

CASSIDIX MEXICANUS (GMELIN). GREAT-TAILED GRACKLE. Large flocks noted at Linares February 27-March 9 and May 4-5. Two females taken during the earlier period: one a small example (wing, 146 mm., tail, 147) of the dark, nominate race; the other (wing, 150, tail, 154) having the measurements and light throat of *C. m. prosopidicola*. Specimens from Montemorelos, 33 miles north of Linares, are mentioned in the original description of the latter race (Lowery, 1938:4).

MOLOTHRUS ATER (BODDAERT). COWBIRD. Common at Galeana and in irrigated districts close by.

TANGAVIUS AENEUS (WAGLER). BRONZED COWBIRD. Common at Galeana. Noted March 1-4 at Linares, in mixed flocks of blackbirds.

Family THRAUPIDAE

PIRANGA LUDOVICIANA (WILSON). WESTERN TANAGER. Common in large trees at Linares, February 28-March 5. Female taken February 28.

PIRANGA FLAVA DEXTRA BANGS. EASTERN HEPATIC TANAGER. Two seen in foothills 15 miles southwest of Linares, March 15: an adult male (collected); and an olive and yellow bird, probably a female. The male specimen is a typical example of *dextra*, the red of its back plumage being only slightly veiled with gray, and its measurements (wing, 99; tail, 83) being close to the average for the race (wing, 99.2; tail, 79.4) as reported by Zimmer (1929:211), though larger than those of Bangs' type, from Jalapa, Veracruz (wing, 96; tail, 74.5).

Family FRINGILLIDAE

RHODOTHRUPIS CELAENO (LICHTENSTEIN). CRIMSON-COLLARED GROSBEAK. A few seen in foothills 14-16 miles southwest of Linares, March 2-5. Adult male taken there March 2.

RICHMONDENA CARDINALIS CANICAUDA (CHAPMAN). GRAY-TAILED CARDINAL. Common. A male and two females taken at Linares measure, respectively; wing, 91, 89, 83 mm., tail, 103, 95, 90.5. A male taken at Galeana measures: wing, 93, tail 105.5.

PYRRHULOXIA SINUATA SINUATA (BONAPARTE). TEXAS PYRRHULOXIA. Fairly common, but local. Two females taken, one at Linares, March 4, and one at Galeana, March 12 (wing, 94 mm., tail, 104).

HEDYMELES MELANOCEPHALUS MELANOCEPHALUS (SWAINSON). ROCKY MOUNTAIN BLACK-HEADED GROSBEAK. Two males in somewhat mixed plumage taken March 2 among foothills 14 miles southwest of Linares, belong to the large-billed, nominate race that breeds in the Rocky Mountains. This is *H. m. papago* of the 1931 A. O. U. Check-List (see van Rossem, 1932: 489 and 1934: 357).

CYANOCOMPSA PARELLINA (BONAPARTE). BLUE BUNTING. Fairly common in lower foothills 14-16 miles southwest of Linares. Here three males

and two females (gonads somewhat enlarged) were taken March 2-5. Two of the males are identical with topotypical male *C. p. lucida* from the Arroyo de la Presa (near Victoria, Tamaulipas); but one is definitely darker, more purplish blue throughout.

PASSERINA CYANEA (LINNAEUS). INDIGO BUNTING. Male (testes slightly enlarged) in full winter plumage (no prenuptial molt) taken 14 miles southwest of Linares, March 2 (Sutton).

CARPODACUS MEXICANUS POTOSINUS GRISCOM. SAN LUIS HOUSE FINCH. Subadult male (wing, 79.5 mm., tail, 66), with heavily streaked under parts and sprinkling of red on throat and chest, taken March 4, at Linares. Not seen at Galeana.

SPOROPHILA TORQUEOLA SHARPEI LAWRENCE. SHARPE SEEDEATER. Noted infrequently at Linares March 1-4. Male (no black on throat) and female taken during this period.

SPINUS TRISTIS PALLIDUS MEARNS. PALE GOLDFINCH. A female taken March 13 at Galeana is quite pale and gray above in comparison with winter females of *S. t. tristis*. The wing measures 70.5 mm., the tail, 47.

SPINUS PSALTRIA PSALTRIA (SAY). ARKANSAS GOLDFINCH. Noted infrequently, usually in flocks. Male (testes noticeably enlarged) taken at Linares March 7. Two males (one a green-backed, subadult bird) taken at Galeana, March 8.

ARREMONOPS RUFIVIRGATUS (LAWRENCE). TEXAS SPARROW. Fairly common at Linares. Two males and a female taken February 28-March 6 are intermediate between *A. r. rufivirgatus* and *A. r. ridgwayi*, being noticeably darker chested and somewhat shorter tailed than topotypes of the former. They measure, respectively: wing, 64 mm., 64, 62; tail, 64, 64, 65.

OBERHOLSERIA CHLORURA (AUDUBON). GREEN-TAILED TOWHEE. Common at Galeana where a male (wing, 76 mm., tail, 80) was taken March 8 (Lea). One seen 9 miles southwest of Linares, March 5.

PIPILO FUSCUS POTOSINUS RIDGWAY. PLATEAU BROWN TOWHEE. Among the commonest birds at Galeana and Iturbide. A male and female (wing, 89 mm., 84; tail, 94, 98) taken March 7 are close to *P. f. potosinus* though, judging from measurements given by Ridgway, they are small for that race. Not seen anywhere about Linares.

CALAMOSPIZA MELANOCORYS STEINER. LARK BUNTING. Small flocks (mostly females, apparently) noted along road southwest of Linares, March 2 and 7, and just east of Galeana, March 7.

PASSERCULUS SANDWICHENSIS (GMELIN). SAVANNAH SPARROW. Recorded daily at Linares, February 28-March 9. A female (wing 65 mm., tail, 50) taken there March 3 is noticeably dark on the crown and back, the chest being heavily streaked, and the browns of the plumage being nowhere very rufescent. It resembles closely a female taken at Saucier, Harrison Co., Mississippi, on March 19, 1938 (GMS 8247), that has been identified by Mr. J. L. Peters as intermediate between *oblitus* and

nevadensis. Not common at Galeana. A female (wing, 67.5 mm., tail, 51), taken there March 13, represents the race *nevadensis*.

AMMODRAMUS SAVANNARUM PERPALLIDUS COUES. WESTERN GRASS-HOPPER SPARROW. Male (wing, 62.5 mm., tail, 48) taken at edge of field 10 miles southwest of Linares, March 2.

POECCETES GRAMINEUS CONFINIS BAIRD. WESTERN VESPER SPARROW. Seen infrequently near Linares, February 28-March 9. A male and female taken March 3 measure: wing, 79 mm., 76; tail, 66, 60.

CHONDESTES GRAMMACUS STRIGATUS SWAINSON. WESTERN LARK SPARROW. Flocks seen repeatedly at Linares, February 28-March 9. Male (wing, 86, tail, 69.5) taken there February 28. Noted but once at Galeana: a flock of 15, March 7, from which a male (wing, 86, tail, 69) was taken.

AIMOPHILA RUFICEPS BOUCARDI (SCLATER). BOUCARD RUFIOUS-CROWNED SPARROW. Not seen at Linares nor anywhere in the flat country thereabouts, but common at Galeana and in the vicinity of Iturbide, a male and three females being taken in this montane district, March 7-13. These are somewhat more brightly colored than *boucardi* from the Monterrey district of Nuevo León and from Hidalgo, but they are not bright enough for *eremoeca* or *scotti*.

AIMOPHILA CASSINI (WOODHOUSE). CASSIN SPARROW. Noted southwest of Linares February 28 and March 3, a single bird on each occasion.

AMPHISPIZA BILINEATA BILINEATA (CASSIN). BLACK-THROATED SPARROW. Fairly common about Linares February 28-March 6. In a female collected March 2, the white tip of the outermost rectrix is about 18 mm. long. A male taken by Thomas D. Burleigh on March 22, 1939 is very long-billed (11.5 mm.) but not noteworthy otherwise (wing, 63 mm., tail, 56.5, white tip on outer rectrix, 14).

SPIZELLA PASSERINA (BECHSTEIN). CHIPPING SPARROW. Flocks noted at Linares, March 5-8. A male in winter plumage taken there March 6, is much too dark above for *arizonae* though it is large (wing, 71.5 mm., tail, 60) for the eastern race. Common at Galeana where two males (wing, 72, 73) and a female (wing, 71) *arizonae* were taken, March 9-11.

SPIZELLA PALLIDA (SWAINSON). CLAY-COLORED SPARROW. Seen daily in open country about Linares February 28-March 9. Male and two females taken March 1-2.

SPIZELLA PUSILLA PUSILLA (WILSON). EASTERN FIELD SPARROW. A few seen among sparrow flocks near Linares, February 27-March 4. A female taken March 4 has the rich colors of the eastern race but the size of *arenacea* (wing, 63 mm., tail, 64.5). It probably represents the intermediate mid-western population so ably discussed by Wetmore (1939:240-1).

SPIZELLA ATROGULARIS ATROGULARIS (CABANIS). MEXICAN BLACK-CHINNED SPARROW. Subadult male (with black feathers just coming into chin) taken from small flock in canyon near Iturbide, March 8 (Sutton).

ZONOTRICHIA LEUCOPHRYS (J. R. FORSTER). WHITE-CROWNED SPARROW. Several seen March 1, at edge of Linares.

MELOSPIZA LINCOLNII LINCOLNII (AUDUBON). EASTERN LINCOLN SPARROW. Fairly common. Male (wing, 60.5 mm., tail, 57) taken at Linares, March 3. Female (wing, 62, tail, 59) taken at Galeana, March 10.

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