THE BIRDS OF SOUTHEASTERN COAHUILA, MEXICO

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By CHARLES A. ELY

Over a period of a year and a half I collected birds in southeastern Coahuila, México. The following periods were spent in the field: December 24, 1957, to January 1, 1958; June 13 to August 10, and September 19 to November 19, 1958; April 16 to June 13, 1959. For most of the time I was quartered at Las Vacas about 8 miles southeast of Saltillo and $3\frac{1}{2}$ miles south of El Diamante. Numerous collecting localities were visited within a 40-mile radius of Saltillo. The most important of these were: Arteaga, 9 miles east of Saltillo; General Cepeda (formerly Patos) and the nearby Sierra Guadalupe, 30 miles west of Saltillo; San Antonio de las Alazanas, 27 miles southeast of Saltillo and near the border of Nuevo León.

The physiography and vegetation of this region have been described by Muller (1939, 1947), Baker (1956) and Urban (1959). In general, desert scrub extends upward to about 6500 feet. A montane low forest of either piñon-juniper-yucca, pine-oak-madroño, or scrub oak extends upward to 8500 feet on north slopes and higher on south slopes. Conifer forests appear above this elevation, and they are well developed above 9500 feet. Much of the original conifer forest, however, has been destroyed. Chaparral now covers many denuded and eroded slopes above 7500 feet. No timber line is reached but one is approached at 12,500 feet east of San Antonio de las Alazanas.

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Details are presented when they augment or conflict with distributional or taxonomic material presented by Urban (1959), or if they constitute information of special interest. Further details are available in my unpublished dissertation "The Avifauna of Southeastern Coahuila, Mexico" on file at the University of Oklahoma. A total of 1063 specimens was taken; these represent 141 species. Positive sight records were made of 25 additional species. An asterisk marks forms previously unreported from southeastern Coahuila; a double asterisk marks forms previously unreported from the state.

**Podilymbus podiceps. Pied-billed Grebe. One seen near Arteaga, April 16.

*Ardea herodias. Great Blue Heron. One seen near Arteaga, April 16.

*Anas cyanoptera. Cinnamon Teal. Pair seen near Arteaga, April 16, 18; male, 11 miles west of San Antonio de las Alazanas, April 18.

*Anas discors discors. Blue-winged Teal. Five observations: October 24 to November 4, April 18 (2 collected).

*Anas crecca. Green-winged Teal. Three seen near Las Vacas, November 3, 4.

*Mareca americana. American Widgeon. Two seen near Arteaga, April 16 to 23.

*Bucephala albeola. Bufflehead. Five seen near Arteaga, November 19.

*Accipiter cooperii. Cooper Hawk. One seen near Las Vacas, June 21.

*Buteo jamaicensis fuertesi. Red-tailed Hawk. Freshly killed specimen examined, August 1.

*Buteo jamaicensis calurus. Red-tailed Hawk. Single specimens collected May 21, November 7.

** Aquila chrysaëtos. Golden Eagle. Single birds seen near Las Vacas, June 18, July 2, October 1.

Falco mexicanus. Prairie Falcon. Breeding. One of two immatures collected at nest cliff one mile northwest of Las Vacas on south slope of Mount Zapalinamé, June 30.

**Falco peregrinus anatum. Peregrine Falcon. Breeding. Immature collected at nest cliff, one mile from Prairie Falcon nest and on opposite slope of same mountain, July 14. Jan., 1962

**Falco columbarius richardsonii. Pigeon Hawk. One collected near Las Vacas, November 15.

*Fulica americana americana. American Coot. Near Las Vacas and Arteaga; September 29 to October 13, April 16 to 23; one collected.

**Capella gallinago. Common Snipe. Single birds seen October 11 in desert and October 24 to November 4 in flooded corn field.

Rhynchopsitta pachyrhyncha terrisi. Thick-billed Parrot. Present in small numbers in the mountains south of Saltillo, chiefly in pines and Douglas fir above 9000 feet. Much more common in the extensive high conifer forests 11 miles east of San Antonio de las Alazanas, chiefly above 10,000 feet. During most of the day, the birds were found in small flocks feeding on conifer seeds or the juice of agave flowers. In the piñon season flocks were observed as low as 7500 feet. During summer, east of San Antonio de las Alazanas, small flocks started gathering in several favored localities at 10,200 feet in late afternoon. By dusk several hundred birds would be assembled, and after much calling the whole flock would fly eastward along the ridge to a roosting locality. I never saw the morning dispersal. Even when in large flocks, birds characteristically flew in pairs, one bird just behind and to one side of the other. The calling of a large flock in flight or feeding was almost deafening. The birds covered great distances and the usual sight record was of a pair or of a small flock flying very high over Las Vacas in a general southerly direction.

At present I am treating the "terrisi" population as a race of R. pachyrhyncha, but I am not convinced that this is correct. The birds of Coahuila and Nuevo León are distinct from specimens of R. pachyrhyncha from the Sierra Madre Occidental, but whether they represent a distinct species or a very well defined race cannot be determined at present. The breeding range of this form is very poorly known and I have seen no specimens from between Saltillo and the Sierra Madre Occidental. Hardy and Dickerman (1955:305-306) felt that their specimens from Coahuila were intermediates between R. p. pachyrhyncha and R. p. terrisi and were closer to the latter. My series agrees with their birds in coloration and averages slightly larger in all dimensions. I feel certain that a larger series of "typical terrisi" will readily include the Coahuila "intergrades."

The maroon forehead is a good field character at reasonable range and all birds that I have examined in the flesh or have seen at close range in the field have been maroon rather than scarletfronted. One of my five adults and the Kansas University specimens have a few scarlet feathers among the maroon. My five first-year birds also have a few scarlet feathers. One of my most reliable guides claims to have collected scarlet-fronted birds 11 miles east of San Antonio de las Alazanas in the winter months. Both forms wander and perhaps birds from western areas do wander into this area in winter. If so, stragglers from such a flight might remain to nest, and possibly this would explain the "intergrades" which have a few scarlet feathers in the otherwise maroon foreheads.

I did not find this species in the Sierra Guadalupe in June although habitat seemed favorable. I received conflicting reports as to whether it is present there during the breeding season.

*Coccyzus erythropthalmus. Black-billed Cuckoo. One collected near Las Vacas, September 21. *Coccyzus americanus. Yellow-billed Cuckoo. Heard near Saltillo during June.

Otus flammeolus flammeolus. Flammulated Owl. Pair collected at nest hole in open pine woods, 11 miles east of San Antonio de las Alazanas, May 28.

*Otus asio suttoni. Screech Owl. Breeding, chiefly in piñon-juniper and open pines between 7500 and 9500 feet. Five specimens collected; racial identification confirmed by J. T. Marshall, Jr.

*Glaucidium gnoma californicum. Pygmy Owl. Female collected with eggs in pine-chaparral, 7500 feet, near Las Vacas, April 25. Measurements are: flattened wing, 93.5 mm.; tail 66.5 mm.

*Caprimulgus vociferus. Whip-poor-will. Breeds on conifer-covered north slopes between 8000 and 10,500 feet. My series of 6 birds shows considerable variation but seems referable to the variable and poorly defined race C.v. oaxacae.

Aëronautes saxatalis. White-throated Swift. Breeding. My specimen is nearest A. s. saxatalis but approaches A. s. sclateri in size. Female: flattened wing, 148.5 mm.; tail, 60.5 mm.

***Hylocharis leucotis leucotis*. White-eared Hummingbird. Singing male collected in conifer forest, 9500 feet, 15 miles east of San Antonio de las Alazanas, July 8.

*Eugenes fulgens fulgens. Rivoli Hummingbird. Chiefly in open conifers above 8000 feet. One collected.

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Calothorax lucifer. Lucifer Hummingbird. Common breeder below 7500 feet. Egg dates, May 19 to July 25; 9 birds collected.

Selasphorus platycercus platycercus. Broad-tailed Hummingbird. Common breeder above 7500 feet. Egg dates, June 17 to July 15; 13 birds collected.

Ceryle alcyon. Belted Kingfisher. Singles seen near Las Vacas, September 28, October 1. My specimen, a female, is intermediate between C. a. alcyon and C. a. caurina in size. Flattened wing, 166.5 mm.; tail, 100 mm.

Colaptes cafer nanus. Red-shafted Flicker. Common breeder; 16 collected. I have re-examined the Couch specimen (female, USNM no. 4041; wing, 149 mm.; flattened wing, 151 mm.; tail, 98 mm.) reported by Baird (1859:6) and subsequently cited by others and find it to be typical C. c. nanus.

Centurus aurifrons. Golden-fronted Woodpecker. My three adults are intermediate between C.a. aurifrons and C.a. incanescens but nearer the former.

*Sphyrapicus varius nuchalis. Yellow-bellied Sapsucker. Single birds were collected near Las Vacas on October 13 and November 4.

**Sphyrapicus thyroideus nataliae. Williamson Sapsucker. Male collected (Sept. 30) near Las Vacas. Dendrocopos villosus. Hairy Woodpecker. Breeding in coniferous forests. My series of 8 birds contains both very light-breasted (D. v. icastus type) and dark (D. v. intermedius type) birds but averages nearer the latter.

Dendrocopos scalaris. Ladder-backed Woodpecker. Breeding chiefly below 7000 feet. My series of 10 birds is intermediate between D. s. symplectus and D. s. giraudi but is nearer the former. Fall birds in particular are dark and approach giraudi in color.

*Sayornis phoebe. Eastern Phoebe. One seen October 11 on Sierra Guadalupe; one collected October 19 at Las Vacas.

*Muscivora forficata. Scissor-tailed Flycatcher. Near Las Vacas, October 19 to 22; two collected. **Tyrannus verticalis. Western Kingbird. One collected near Las Vacas, April 30.

Myiarchus cinerascens. Ash-throated Flycatcher. My series of 12 birds is intermediate between M.c. cinerascens and M.c. mexicanus but is nearer the former.

Contopus pertinax pallidiventris. Coues Flycatcher. Breeding; one collected. I have re-examined the specimen from Diamante Pass (Burleigh and Lowery, 1942) and consider it to be pallidiventris.

**Empidonax flaviventris. Yellow-bellied Flycatcher. Single immatures were collected near Las Vacas, September 24, 25.

Empidonax affinis trepidus. Pine Flycatcher. Common breeder in conifers, especially Douglas firs, above 9000 feet; 18 birds collected.

Empidonax difficilis hellmayri. Western Flycatcher. Common but local breeder in shady ravines between 7500 and 9000 feet. My series of 9 birds plus 3 breeding birds from the Sierra Guadalupe (USNM) are clearly *hellmayri.* I have also re-examined the specimen reported by Burleigh and Lowery (1942:194). It is strikingly different and resembles breeding *occidentalis* from the state of México.

Empidonax fulvifrons pygmaeus. Buff-breasted Flycatcher. I collected four from a family of six in open pines, 9500 feet, 11 miles east of San Antonio de las Alazanas, June 28. This species was a rare transient in other areas.

Tachycineta thalassina. Violet-green Swallow. Breeding birds approach T.t. thalassina in size but have the purple and green rumps of T.t. lepida.

Parus sclateri. Mexican Chickadee. My specimens (27 birds) are intergrades between P. s. eidos and P. s. sclateri but are nearer the former.

Psaltriparus melanotis. Black-eared Bushtit. My specimens (20 birds) are intermediate between P. m. iulus and P. m. lloydi but are nearer the former.

**Sitta pygmaea flavinucha. Pigmy Nuthatch. Local breeder above 9800 feet. My specimens (10 birds) are nearest flavinucha on basis of both large size and coloration. These specimens and birds from nearby Cerro Potosí, Nuevo León, are slightly larger than typical flavinucha from the southern Sierra Madre Oriental. Five males average: wing, 69.0 mm. (67.5–70.5 mm.); flattened wing, 70.1 mm. (68–72 mm.); tail, 37 mm. (36.5–37.5 mm.). Five females average: wing, 68.5 mm. (67.5–69.5 mm.); flattened wing, 69.6 mm. (68.5–71 mm.); tail, 36.6 mm. (36–37.5 mm.).

Campylorhynchus brunneicapillus. Cactus Wren. My series of 6 birds is intermediate between C. b. guttatus and C. b. couesi but is nearer the former.

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Thryomanes bewickä. Bewick Wren. Breeding birds as a series (23 specimens) are nearest T.b. eremophilus but approach T.b. murinus in darker, brownish coloration.

Troglodytes aedon. House Wren. When viewed in large series, breeding specimens from southeastern Coahuila are highly variable, but the majority fall into two noticeable series: (1) light colored (especially below), grayish birds which resemble T.a. cahooni from the Sierra Madre Occidental; (2) darker, richer brown birds which more nearly resemble T.a. compositus of the Sierra Madre Oriental. Other specimens are intermediate in coloration. Specimens from northwestern Coahuila are all definitely of the grayish cahooni type. In southeastern Coahuila both types occur in the same populations. Larger series from critical areas are needed before these intermediate populations can be understood. Fourteen were collected.

Toxostoma curvirostre. Curve-billed Thrasher. Breeding birds are intermediate between T.c. celsum and T.c. oberholseri but in my opinion are closer to the former.

*Hylocichla guttata auduboni. Hermit Thrush. Six birds were collected near Las Vacas between September 25 and October 31; one was collected on May 21. Wings of five males average 102.8 mm.; of two females, 96.5 mm.

**Catharus occidentalis fulvescens. Russet Nightingale-thrush. This species was common but even singing males were difficult to observe in the dense undergrowth. I found it only in the conifer zones of the ridge directly south of San Antonio de las Alazanas, from a point 11 miles east of town eastward along the ridge into Nuevo León. It was most common in the dense encinal under Douglas firpine forests, and in mixed Douglas fir and fir forest from 9000 to 10,500 feet. It was less common in the more open fir forests above. Birds were singing on territory during May, June, and July; a male collected on May 27 was in breeding condition.

Phainopepla nitens nitens. Phainopepla. Breeding. Sutton and Burleigh (1939:39) reported specimens of P. n. nitens and P. n. lepida from Diamante Pass, March 6. Actually three birds were collected, two of which (adult male: wing, 100.5 mm.; tail, 98 mm.; adult female: wing, 100 mm.; tail, 96 mm.) are clearly nitens. The third specimen, an immature male in mixed plumage, reported as *lepida*, has its first season's primaries. The wing is small (95 mm.) but within the range of three immatures (94.5–95.5 mm.) which I collected in the same area in early fall. This specimen cannot be positively identified to race, but in my opinion is P. n. nitens and is short-winged due to immaturity.

Lanius ludovicianus. Loggerhead Shrike. My series of 15 birds is intermediate between L.l. mexicanus and L.l. exclusitorides but is nearer the former.

Vireo huttoni carolinae. Hutton Vireo. My series of 21 birds and all Coahuila material that I have examined (CU, CM, KU, USNM) is clearly of this race. I have seen no specimens from Coahuila that resemble V.h. stephensi and feel that Urban's suggestion that stephensi migrates through southeastern Coahuila (1959:492) is unfounded.

**Vireo bellii bellii. Bell Vireo. One collected near Las Vacas, October 19.

Vermivora celata. Orange-crowned Warbler. My specimens (6 birds) of migrants show varying amounts of intergradation between V.c. celata and V.c. orestera but are nearer celata in that they are not strongly yellow below.

**Vermivora ruficapilla ruficapilla. Nashville Warbler. Eight were collected between mid-September and late October.

Vermivora crissalis. Colima Warbler. Common breeder thoughout southeastern Coahuila in chaparral dotted with 15- to 20-foot pines, at elevations from 7200 to 10,500 feet; in some areas it was common in low encinal bordering conifer forest. Nesting data: female with 5 mm. ovum, April 23; nest with three eggs, May 30; nest with three newly hatched young, May 31; parents with small juveniles, June 14, 20, July 19. In addition, the Sutton collection contains a juvenile taken from a nest of four, $5\frac{1}{2}$ miles southeast of El Diamante by R. R. Graber, June 21, 1956. On August 4, I collected an immature male which was undergoing an extensive postjuvenal body molt. My latest 'all date is September 26.

Dendroica chrysoparia. Golden-cheeked Warbler. Single immatures were collected near Las Vacas on July 22 and August 2. I feel that Urban's statement that this species breeds in Coahuila (1959: 496) is unfounded.

**Dendroica dominica albilora. Yellow-throated Warbler. One collected near Las Vacas, October 2. **Seiurus aurocapillus aurocapillus. Ovenbird. One collected near Las Vacas, September 28.

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**Oporornis tolmiei monticola. MacGillivray Warbler. Present in suitable habitat on all mountains visited in southeastern Coahuila; common breeder in chaparral-pine and low encinal, especially in ravines on steep, north-facing slopes, from 8000 to 10,500 feet. It was difficult to observe when not singing but the "chip" alarm note was distinctive and birds occasionally responded to squeaking. Pairs were observed on territory from May 21 to July 22, and birds remained in the area to at least August 8. I saw a female with two large juveniles on July 5 near Las Vacas and collected an immature female from a family group 15 miles east of San Antonio de la Alazanas, July 8.

Phillips (1947:296-300) described a clinal increase in length of tail from north to south. My series, from very near the southern limits of the breeding range of the species, confirms Phillips' findings by having longer tails and less difference between tail- and wing-length than do northern series.

Piranga rubra. Summer Tanager. Single birds collected near Las Vacas, September 20, 23, and 28, are intermediate between *P.r. rubra* and *P.r. cooperi* in both size and coloration.

Spinus pinus. Pine Siskin. Three breeding birds and two of seven fall and early spring birds are clearly S. p. macropterus in color, markings and size (wing, 74–77.5 mm., average, 75.9 mm.). The remaining five are nearer S. p. pinus in coloration but average larger (wing, 74.0 mm.) than do pinus from the United States.

Aimophila ruficeps. Rufous-crowned Sparrow. Birds from southeastern Coahuila have been variously considered to be A.r. boucardi, intermediates between boucardi and A.r. tenuirostris, or between boucardi and A.r. eremoeca. Ten breeding birds examined are nearest tenuirostris of northern Coahuila and western Texas. In darkness of crown and breadth of dorsal streaking, however, they approach boucardi. Dorsally they are gray, like boucardi and tenuirostris, rather than rufescent as in eremoeca.

Amphispiza bilineata. Black-throated Sparrow. My specimens are intermediate in size and are dark above; thus they are nearest to A.b.grisea. Some specimens show intergradation with A.b. bilineata. Seasonal and age variations are considerable and large series are needed from critical areas.

Junco phaeonotus. Mexican Junco. Breeding birds are nearest to J. p. palliatus but show some intergradation toward J. p. phaeonotus in coloration.

In addition the following forms were recorded. All racial determinations are based on specimens collected:

Coragyps atratus Cathartes aura teter Accipiter striatus velox Accipiter striatus suttoni Buteo albonotatus Parabuteo unicinctus Circus cyaneus Falco sparverius sparverius Callipepla squamata Cyrtonyx montezumae Columba livia Columba fasciata fasciata Zenaidura macroura marginella Zenaida asiatica Scardafella inca Geococcyx californianus Bubo virginianus pallescens Speotyto cunicularia Phalaenoptilus nuttallii nuttallii Lampornis clemenciae clemenciae Melanerpes formicivorus formicivorus Sphyrapicus varius varius Sayornis saya saya Sayornis nigricans

Pyrocephalus rubinus mexicanus Tyrannus vociferans vociferans Nuttallornis borealis Contopus sordidulus veliei Contopus virens Empidonax minimus Empidonax hammondii Empidonax wrightii Eremophila alpestris diaphora Petrochelidon pyrrhonota melanogaster Stelgidopteryx ruficollis Hirundo rustica erythrogaster Corvus corax sinuatus Corvus cryptoleucus Aphelocoma coerulescens cyanotis Aphelocoma ultramarina couchii Cyanocitta stelleri macrolopha Auriparus flaviceps ornatus Sitta carolinensis mexicana Certhia familiaris albescens Troglodytes aedon parkmanii Salpinctes obsoletus obsoletus Catherpes mexicanus albifrons Mimus polyglottos leucopterus

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Oreoscoptes montanus Toxostoma dorsale dumosum Turdus migratorius propinguus Hylocichla guttata guttata Hylocichla guttata sequoiensis Sialia mexicana mexicana Polioptila caerulea amoenissima Polioptila melanura melanura Regulus calendula calendula Anthus spinoletta rubescens Bombycilla cedrorum Vireo bellii medius Vireo solitarius solitarius Mniotilta varia Vermivora superciliosa mexicana Peucedramus taeniatus arizonae Dendroica auduboni auduboni Dendroica auduboni memorabilis Dendroica townsendi Dendroica virens virens Dendroica occidentalis Geothlypis trichas occidentalis Geothly bis nelsoni nelsoni Icteria virens auricollis Wilsonia pusilla pileolata Setophaga ruticilla Setophaga picta Passer domesticus domesticus

Molothrus ater ater Cassidix mexicanus prosopidicola Euphagus cyanocephalus Icterus spurius Icterus parisorum Icterus wagleri wagleri Xanthocephalus xanthocephalus Sturnella neglecta Piranga ludoviciana Carpodacus mexicanus potosinus Spinus psaltria psaltria Pyrrhuloxia sinuata Pheucticus melanocephalus melanocephalus Guiraca caerulea Passerina cyanea Chlorura chlorura Pipilo erythrophthalmus orientalis Pipilo fuscus potosinus Fasserculus sandwichensis anthinus Ammodramus savannarum perpallidus Pooecetes gramineus confinis Chondestes grammacus strigatus Aimophila cassinii Spizella passerina arizonae Spizella pallida Spizella atrogularis atrogularis Melospiza lincolnii lincolnii

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