

## SOME BIRDS OF NORTHWESTERN SONORA, MEXICO

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The traveler visiting Puerto Libertad on the Sonoran coast drives through desert country all the way south from Sásabe, on the Arizona border, except in the fertile valley of the Rio Magdalena about Altar, Pitiquito, and Caborca. Off to the east, however, he sees a well wooded range, the Sierra Carrizal. The whole region is very little known. The fine survey of the bird life of Sonora by van Rossem (1945*b*) shows that few ornithologists have set foot in the large region between the Pajaritos Mountains and the Nogales-Hermosillo highway and railroad, on the east, and the Colorado delta and Punta Peñasca, on the west. Thus it seemed that a visit to the Sierra Carrizal and the Caborca area might prove interesting.

With this in mind, we made camp ten miles south-southwest of Sásabe on the grassy *Aristida*-mesquite plain on the evening of October 19, 1948. After exploring these plains and a nearby small arroyo for three days, we drove south and east 29 miles on October 23 to Rancho Carrizal, at the west end of the Sierra Carrizal nine miles southeast of Los Molinos. This ranch is some five miles west of the lowest oaks, which unfortunately proved very difficult of access. Thus we could spend but two hours, at high noon, in the oaks. Near the ranch itself, however, we found some interesting birds along the main arroyo where a number of large "chinos" (*Mimosa* sp.) grew, besides various smaller trees and shrubs. In this vicinity, too, we first encountered organ-pipe cacti. The whole country here was terribly overgrazed.

On October 27 we drove south, reaching Altar the next morning. After an afternoon's excursion through the Pitiquito farmlands, we camped in the mesquite thicket two miles east of Caborca, across the river from a steep little hill. At the base of this hill ran an irrigation ditch, bordered in spots by brush. This, the adjacent fields, and the brush along the river edges were so full of birds that we spent six days here. On November 4 we again visited Pitiquito briefly, then drove northwest, reaching Sonoyta the next afternoon. Here we spent three days, collecting mainly in the mesquite thicket two miles northeast; but the border town itself and adjacent farmlands to the west were also visited repeatedly.

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In the following list of our more interesting findings, subspecific names are used only when specimens were secured. Wing measurements are of the chord.

*Phalacrocorax auritus*. Double-crested Cormorant. One was seen regularly near Caborca from October 29 to November 2, when it was obtained, furnishing the first inland record for Sonora. Unfortunately, single immature birds cannot be identified racially; the wing, which is worn, measured 311 mm.

*Butorides virescens*. Green Heron. An immature female seen regularly near Caborca, October 29 to November 2, is referred to *anthonyi* because of its pallor, although it is small (wing 179 mm.). A certain amount of white in the primaries suggests partial albinism. At this late date the bird was doubtless wintering.

*Leucophoyx thula*. Snowy Egret. A flock of ten, with other, larger herons, was seen near Caborca on October 29, but not later. No inland records are mentioned by van Rossem.

*Oxyura jamaicensis*. Ruddy Duck. One was seen on a represo in the desert about midway between Caborca and Sonoyta, November 4.

*Mergus serrator*. Red-breasted Merganser. One in female plumage seen near Sonoyta on November 7 and 8, is the first truly inland record for Sonora.

*Cathartes aura*. Turkey Vulture. Seen regularly, but in very small and decreasing numbers except in the Altar-Caborca regions. Even here the largest flock seen was of seven birds on the first evening. After we left Caborca, the Turkey Vulture was seen only once: on the morning of November 6 one was sunning itself in the mesquite forest near our Sonoyta camp, and later presumably the same individual was seen in flight—probably to warmer climes, for we saw it no more. At any rate, we cannot agree that the species is "common" in winter in this part of Sonora.

*Polyborus cheriway*. Caracara. Much scarcer in this region than on the road farther south toward Puerto Libertad as observed by Phillips in February, 1932. At least four were seen at Los Molinos, and five in the next ten miles to the south on October 27. Otherwise, we saw only a single bird, 36 miles northwest of Caborca on November 4.

*Lophortyx gambelii*. Gambel Quail. Birds from Caborca are more richly colored (brownier dorsally) than ones from near Sasabe. Like those from near Tecoripa (Univ. Ariz. Coll.), they are intermediate toward *fulvipectus*. Farther east, such intergrades have been taken north to about 37 miles south of Nogales (Pitelka, 1948); Caborca is probably near their northwestern limit. A female from 21 miles south of Sonoyta is very pale and gray, in fact more so than *pembertoni* of Tiburón Island, which we regard as a synonym of *gambelii*.

*Actitis macularia*. Spotted Sandpiper. In view of the absence of previous Sonora records for October and November, it may be noted that we saw one daily near Caborca, October 30 to November 3.

*Chlidonias nigra*. Black Tern. A lone bird was collected on the Rio Magdalena, October 31. Not only is this the first record from a point definitely within Sonora, but the date is exceptionally late. The specimen proved to be a somewhat emaciated immature female weighing 42.4 grams.

*Columba fasciata*. Band-tailed Pigeon. One was flushed from a mesquite on the plain ten miles south-southwest of Sasabe on October 21. Its occurrence in such a locality must be very rare. Previous Sonora records are all from Nogales eastward.

*Zenaida asiatica*. White-winged Dove. Not a single individual was noted by us at any time. This is noteworthy in view of the report (Neff, 1947) of an exceptionally large nesting colony in the very area, near Caborca, that we worked most intensively.

*Cynanthus latirostris*. Broad-billed Hummingbird. A single female, the only one seen, was taken near Caborca on October 31. This is the farthest northwest that the species has been taken in winter, and in fact the westernmost point of record at any season.

*Calypte anna*. Anna Hummingbird. This species and *C. costae* were about equally common in November and the last of October. The latter was perhaps the more numerous near Caborca, especially about the clumps of flowering *Lycium Berlandieri* within the mesquite thicket; but it seemed to be outnumbered by *anna* farther north, although a male was taken 21 miles south of Sonoyta. Of *anna*, two young males and a female were taken near Caborca, October 31 to November 3, and one at Quitovac, half-way from Caborca to Sonoyta, November 5. One was seen at Sonoyta the same day, and one or two others later. These records extend the autumn range slightly to the south (see van Rossem, 1945a; Phillips, 1947).

*Selasphorus rufus*. Rufous Hummingbird. A female was taken and a young male seen, October 31, near Caborca, and one was seen the next day. At these dates they may have been wintering.

*Chloroceryle americana*. Green Kingfisher. A few were seen and two were taken near Caborca, along steep-banked ditches and at the river. This may possibly represent a range extension or a winter dispersal, since the birds have never been found here previously.

*Asyndesmus lewis*. Lewis Woodpecker. Several were seen, and an immature female was taken, at Rancho Carrizal, where they occurred from the ranch up into the oaks. This was apparently the

most southwesterly point reached in the 1948 flight. One was seen flying over on October 21, ten miles south-southwest of Sasabe, and there was one at Sonoyta on November 5. Prior to 1948, only a single specimen had been recorded in Sonora.

*Pyrocephalus rubinus*. Vermilion Flycatcher. Seen only at Pitiquito and Sonoyta in farmlands, verifying van Rossem's surmise of a considerable recession from this region in winter.

*Tyrannus vociferans*. Cassin Kingbird. One was seen and heard calling near Pitiquito on the evening of October 28. Its status so far west is probably that of a rare transient.

*Tyrannus verticalis*. Western Kingbird. An adult male was taken near Pitiquito on the evening of October 28. It was fat and would doubtless have departed shortly thereafter. The date is quite late, perhaps unusually so.

*Empidonax hammondi*. Hammond Flycatcher. Several *Empidonax* flycatchers that were clearly not *griseus* were seen at Rancho Carrizal. Specimens of *hammondi* were taken both near the ranch (October 23) and in the oaks (October 24). Since the species winters locally in southern Arizona (Monson and Phillips, 1941), it may possibly do so here; if not, the number seen on such late dates is surprising.

*Empidonax griseus*. Gray Flycatcher. Seen only at Rancho Carrizal and in the mesquite thicket near Sonoyta; none taken. Evidently not common in winter in this part of Sonora, from which it has not been recorded previously.

*Camptostoma imberbe*. Beardless Flycatcher. Specimens taken at and above Rancho Carrizal, along the canyons, extend the range of this obscure bird to the northwest. Presumably it winters here, as it does in parts of Arizona. Our two males lack the dusky crowns supposed by some authors to mark *C. imberbe*, but so do some other juvenal and winter specimens (to late March) from Arizona. This appears to be partly seasonal and partly individual variation.

*Eremophila alpestris*. Horned Lark. Seen as far south as the bare playa a bit north of Altar. Here, from a hundred or more birds, we obtained a male *leucolaema* and a female *occidentalis*. A third specimen is peculiarly varied with grayish and richly colored areas; it cannot be placed satisfactorily. These are the southernmost records of any Horned Lark in Sonora. South of Sasabe we obtained only the resident race *adusta*.

*Hirundo rustica*. Barn Swallow. Two or more were seen, flying south, south of Sasabe on October 20. One seen on the river in the mesquite thicket near Sonoyta, November 8, was exceptionally late, if it was not wintering there.

*Tachycineta thalassina*. Violet-green Swallow. Swallows, mostly of this species, were migrating south commonly on October 20 near Sasabe, but the flight ended very abruptly. About forty *Tachycineta* were seen on October 20, plus five or so other swallows; but on October 21 only one flock of two or three *Tachycineta* was noted, and thereafter not a single swallow except for the above-mentioned *Hirundo*.

*Corvus corax*. Common Raven. An adult male taken by Amadon west of Caborca, November 4, is good *sinuatus*, measuring: wing, 438; tail, 237; culmen, 75; bill depth, 24; depth of tarsus, 10.5 mm.; weight, 1067 gms. (see Willett, 1941). Being one of a pair, it may represent the breeding population there. Its molt was not yet completed.

*Parus wollweberi*. Bridled Titmouse. Four specimens from the oaks of the Sierra Carrizal show a slight departure from *phillipsi* in their rather slender bills. The type locality of the latter is in the very next range, the Pajaritos-Mountains, but of course these two ranges are separated by Lower Sonoran Zone in the valleys in which no *Parus* breeds.

*Thryomanes bewickii*. Bewick Wren. A pale *eremophilus* was taken at Rancho Carrizal, and a very few single birds were seen near Caborca and Sonoyta. Presumably it is merely a winter visitant at the latter two localities. Van Rossem lists no records for this part of Sonora.

*Toxostoma bendirei*. Bendire Thrasher. One seen near Pitiquito, November 4, was the only one definitely identified on our trip. This is the westernmost record in Sonora.

*Toxostoma curvirostre*. Curve-billed Thrasher. All our specimens represent the race *palmeri*, with the possible exception of two from the Pitiquito-Caborca area, which have the crissum darker; this is presumably an approach to *maculatum*. The two birds from Rancho Carrizal are also atypical, showing some approach to "*celsum*."

*Toxostoma dorsale*. Crissal Thrasher. Two adult females from Sonoyta are referable to the nominate race, although one is atypical. This is probably near the western limit of this race. One from

45 miles northwest of Caborca is browner (less gray) than most fresh-plumaged birds, and thus hardly comparable. In pallor it seems nearest *T. d. coloradense* van Rossem (1946), to which must be referred a fourth adult female from Rancho Carrizal. This last, taken October 26, is perhaps a vagrant.

*Hylocichla guttata*. Hermit Thrush. As in most of southern Arizona, *H. g. guttata* proved to be the most numerous wintering Hermit Thrush in northwestern Sonora. It was taken at Rancho Carrizal (October 26) and near Caborca (November 3) and at Sonoyta (three, November 7-8). Some of these specimens show a slight approach to "nanus," whereas another, a young male taken near Sonoyta on November 8, is properly referable to that race, which is thus added to the Sonora list.

Two October migrants are interesting. A very young male from the oaks of the Sierra Carrizal, October 24, is an extremely gray and pale bird, even grayer than available *slevini*, but rather large (wing 91.5 mm.). An adult male from south of Sasabe, October 20, is intermediate between *slevini* and *guttata*, and thus represents the race of the Cascade Mountains and of the Rainbow Mountains, southwestern British Columbia, to which we apply tentatively the name *oromela*.

*Hylocichla ustulata*. Swainson Thrush. An immature female taken in a small wash near a ridge-top just below the lowest oaks of the Sierra Carrizal, October 24, is of the northwestern race *H. u. ustulata* (not *oedica*). An equally reddish-looking bird was flushed later that day among the oaks (Phillips). These records are particularly interesting because of the great scarcity of the species in autumn anywhere between the Pacific slope of California (and northwestern Baja California) and its winter home. October 24 is near the end of the fall migration. Can these birds have been lingering from the main flight that perhaps follows the unexplored mountain tops just inland from the Gulf of California? Farther east and north the species is hardly more than a straggler in fall, although common in spring. The race *oedica* is even scarcer in fall, if indeed it occurs then at all.

*Anthus spragueii*. Sprague Pipit. This species is supposed to winter only in the region east and south of the Pecos River. It is unrecorded from New Mexico and trans-Pecos Texas and has long been considered merely casual in Arizona. It was therefore a great surprise to find it on the plains ten miles south-southwest of Sasabe, some 1000 miles farther west. We obtained three specimens, all immatures, and saw at least one other. Since they were always seen singly, we could not tell how many were present, but the species was frequently encountered. Our first specimen, a male (October 21), is of a rather unusual appearance, being quite black-and-straw-yellowish rather than the usual, less contrasting, brown-and-buff. It also has a rather short hind claw. A similar black-and-white juvenile is from the Souris River, which runs from North Dakota into Manitoba, August 9 (Amer. Mus.).

*Bombycilla cedrorum*. Cedar Waxwing. Our brief trip was ample to substantiate van Rossem's contention that previous lack of fall records (and of any record for northwestern Sonora) was due simply to lack of observation. We encountered these waxwings at and above Rancho Carrizal, in the plaza at Caborca and at our camp to the east, and at and around Sonoyta. Indeed, wherever we found tall trees, we found waxwings.

*Vireo huttoni*. Hutton Vireo. A lone adult taken in the oaks of the Sierra Carrizal extends at least the winter range slightly to the westward.

*Vireo solitarius cassinii*. Solitary Vireo. Since these vireos are now known to winter in small numbers in central southern Arizona, it was not surprising to find two in the mesquite thicket near Sonoyta on November 6. An adult female was taken. We were surprised not to see any others in the course of our entire trip.

*Vermivora celata*. Orange-crowned Warbler. These warblers were annoyingly common near Caborca, although they always occurred singly. Our single specimen, like most if not all the birds seen, represents the Rocky Mountain race, *orestera*, for which fall records were lacking heretofore—a striking commentary on our meager knowledge of Sonora birds. We neither detected nor suspected the presence, at this season, of *lutescens*, which van Rossem considers "by far the commonest" race in Sonora.

*Dendroica nigrescens*. Black-throated Gray Warbler. Since this warbler is now known to winter in southern Arizona, it may be expected to do so in most parts of Sonora. But we were surprised to find it the commonest warbler in the Sierra Carrizal, outnumbering even *D. auduboni*, which, however, was scarcer than we had expected. Some eleven individuals were seen there, and one was taken in the oaks. A female was seen near Caborca daily through October 31, but not thereafter.

*Oporornis tolmiei*. MacGillivray Warbler. Two females were taken near Caborca, an immature on October 29 and an adult on November 1. The former represents the nominate race. The latter,

which was first seen on October 31, represents the proposed race *intermedia*. The birds were probably still on migration, although the dates are very late.

*Geothlypis trichas*. Yellow-throat. Several were seen near Caborca. Two young males taken represent the races *arizela* and *occidentalis*.

*Icteria virens*. Yellow-breasted Chat. A young male was discovered in dense, low thickets in the mesquite forest near Caborca, November 1, and was obtained the next day. A number of secondaries in the left wing were in sheaths, their tips barely projecting. The total length of these feathers is 15.5 mm. The bird was not fat, however (weight 23.1 grams), and it is therefore doubtful that it would have migrated farther south in any case. In its small size (wing 74, tail 75 mm.) and dark color, it seems to approach the race *tropicalis*.

*Wilsonia pusilla*. Pileolated Warbler. A young male taken near Caborca, October 30, was not fat; it represents the race *chryseola*, which is known to winter in southern Sonora.

*Tangavius aeneus*. Red-eyed Cowbird. Seen only at Pitiquito, where a few were presumably wintering.

*Sturnella magna*. Eastern Meadowlark. Three specimens (*S. m. lilianae*) taken ten miles south-southwest of Sasabe substantiate its occurrence this far west in Sonora.

*Piranga ludoviciana*. Western Tanager. An adult male taken near Caborca on October 30 was quite fat and possibly was a belated transient.

*Pyrrhuloxia sinuata*. Pyrrhuloxia. Less common than the Cardinal in this part of Sonora. Found at Rancho Carrizal, and a male and a female were seen by Amadon near Caborca; but in the Sonoyta region only Cardinals were encountered.

*Guiraca caerulea salicaria*. Blue Grosbeak. Two were taken from a flock of three or more in a grassy, weedy cotton-field near Caborca, November 3, at which date they were presumably wintering.

*Passerina amoena*. Lazuli Bunting. Occasionally heard in the Pitiquito-Caborca region; a male was well seen on November 2. Since it is now known to winter, at least occasionally, in central southern Arizona, similar occurrences in northern Sonora may be expected.

*Spinus pinus*. Pine Siskin. A very few were seen near Sasabe, Caborca, and Sonoyta, and in the oaks of the Sierra Carrizal, but none was taken. These records appear to be the southernmost for the coastal plain.

*Spinus tristis*. American Goldfinch. A single bird was heard flying over the mesquite thicket near Sonoyta on November 6, giving its characteristic call. It could not be secured. There are no previous Sonora records.

*Pipilo maculatus*. Spotted Towhee. Not at all common; single birds were seen well at Rancho Carrizal, near Caborca, and in the mesquite thicket near Sonoyta. Special efforts netted only a single specimen, an adult female from Rancho Carrizal, October 27, which is of the race *montanus*. These are the southernmost Sonora records; all the birds were, of course, winter visitants.

*Ammodramus bairdii*. Baird Sparrow. Occurrence on the Sonora side of the border near Sasabe is substantiated by an adult male taken ten miles south-southwest, October 23. This was the only one seen. In former years the species was doubtless common, although but two or three others have been taken in Sonora, and these along the border in the extreme northeast (Animas Valley, 1892, by Mearns).

*Amphispiza bilineata*. Black-throated Sparrow. A young male taken near Sasabe, October 20, is quite gray like *confinis*, more so than are birds of the Ajo Mountains. The systematic status of birds of this border region is unsettled; see Phillips and Pulich, 1948.

*Junco hyemalis*. Slate-colored Junco. A young male taken in the mesquite thicket near Sonoyta on November 6 adds the race *hyemalis* to the Sonora list, although its pale gray sides contrast slightly with the head.

*Junco oregonus*. Oregon Junco. Juncos of the *montanus* type were seen near Caborca and south of and near Sonoyta. At least four juncos were seen at the former locality, all or nearly all of which seemed just like the two taken on November 1, which are of the large interior race *J. o. montanus*. There is only one previous published record of this race in Sonora (Peet, 1946), but it is probably common. An occasional *J. o. mearnsi* was seen by Phillips in the oaks of the Sierra Carrizal and in the mesquite thicket near Sonoyta, but none was positively identified elsewhere.

*Junco caniceps*. Gray-headed Junco. Seen only at and above Rancho Carrizal; a specimen was

taken in the oaks, October 24. All were of the race *caniceps* save a characteristic hybrid between *mearnsi* and *caniceps* seen at the ranch, October 24.

*Spizella atrogularis*. Black-chinned Sparrow. Two were seen (one taken) near and below the lowest oaks, on a ridge and in a canyon of the Sierra Carrizal, October 24. It is doubtless a winter resident here. The species previously was known in Sonora only from a single specimen taken in June in the Sierra de Oposura (Cahoon).

*Zonotrichia coronata*. Golden-crowned Sparrow. A single bird in "immature" plumage was seen by Phillips in a large flock of *gambeli* near Caborca on November 2. He could not secure it.

*Melospiza georgiana*. Swamp Sparrow. A single bird was seen near Caborca on October 31 and November 1. Our best and repeated efforts to collect it failed.

*Melospiza melodia*. Song Sparrow. Although not previously recorded so far southwest in the Gulf lowlands, Song Sparrows are both residents and winter visitants near Caborca, where we found them quite common. The *montana* type was only slightly outnumbered by the redder *fallax* type. Our seven specimens include two *montana*, one of which is of the pale variety breeding in Nevada; an immature female *fisherella* was taken on October 30, which constitutes a new record for Sonora and, indeed, for Mexico; a young male *saltonis* taken the same day, is the southernmost record for that race; and three birds evidently represent the breeding population, which is also represented by a breeding male in the senior author's collection taken on an earlier trip to Caborca with van Rossem.

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