

NOTES ON THE AVIFAUNA OF THE RIO GRANDE VALLEY,  
NEW MEXICO

By GALE MONSON

The writer observed birds in the Rio Grande Valley of central New Mexico during the periods December 4, 1940, to March 12, 1941, and November 17, 1941, to June 12, 1942. The bulk of the notes are from Socorro County, especially the vicinity of the village of San Antonio and the Bosque del Apache National Wildlife Refuge near San Antonio.

Although the major part of the immediate Rio Grande Valley in this area is irrigated farm land, a "bosque" of cottonwood (*Populus Fremontii*), willow (*Salix amygdaloides*), tamarisk (*Tamarix gallica*), tornillo or screw bean (*Prosopis pubescens*), and mesquite (*Prosopis juliflora*) of width varying from a few feet to nearly half a mile follows the river banks. On the Bosque del Apache Refuge there are large areas of salt grass (*Distichlis spicata*) and cat-tail (*Typha latifolia*), and periodically inundated mud flats. The immediate valley, and the adjacent hills whose predominant plant is the creosote bush (*Larrea divaricata*), lie in the Lower Sonoran Zone, which extends north beyond Socorro. West of the river, the land rises sharply to the Magdalena Mountains and their foothills into the Upper Sonoran, Transition, and Canadian zones with elevations of more than 9,000 feet.

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*Aechmophorus occidentalis*. Western Grebe. An adult male was taken on the Rio Grande Bird Refuge (Elephant Butte Reservoir) in Sierra County, January 11, 1942. Three others were seen the same date and place. Florence Merriam Bailey ("Birds of New Mexico," New Mexico Department of Game and Fish, 1928) lists but one record for the state, in 1873.

*Phalacrocorax auritus*. Double-crested Cormorant. A male taken on the Rio Grande Bird Refuge January 11, 1942, was identified as *P. a. auritus* by Aldrich. The species is common on the reservoir during the winter, at least, and it was occasionally observed as a migrant on the Bosque del Apache Refuge (April 1 to May 18, 1942; also November 24, 1941). Aldrich sends me the following records from Fish and Wildlife Service files: 200 nesting on the Rio Grande Bird Refuge, May 17, 1937 (Gilchrist); 50 nesting in McRae Canyon (Rio Grande Bird Refuge?), June 19, 1937 (Gilchrist); 20 seen on Bosque del Apache Refuge, May 19, 1937 (Gilchrist); one shot at Cutter, Sierra County, December 1, 1913, from a flock of three, specimen identified by Oberholser. Mrs. Bailey does not include this species of cormorant in her book, and I believe these are the first published records of the species in the state. I have not had opportunity to examine the two specimens of Mexican Cormorant (*P. olivaceus mexicanus*) mentioned by Mrs. Bailey (*op. cit.*), but it is possible that at least one of these may actually be *P. auritus*.

*Casmerodius albus*. Common Egret. This, another species not mentioned by Mrs. Bailey, was occasionally observed on the Bosque del Apache Refuge on February 20, 1941, and from January 10 to May 28, 1942; total individuals seen numbered 24. The only previously published record for the state is that of two seen by Little at the Jornada Range Reserve, Dona Ana County (Condor, 26, 1934:247). At present, it is my opinion that the species is of regular occurrence along the Rio Grande north to Albuquerque during spring and summer, although apparently not breeding.

*Botaurus lentiginosus*. American Bittern. One was seen on the Bosque del Apache Refuge, December 5, 7, 12, and 18, 1940, very likely the same individual on each date. This is the first winter record for New Mexico. An individual seen February 23, 1941, on the Refuge may also be regarded as a wintering bird.

*Branta canadensis*. Canada Goose. A Canada Goose taken on the Bosque del Apache Refuge, November 4, 1941, has been determined as *B. c. leucopareia* by Aldrich; it is the first record of this subspecies for New Mexico. Numerous sight records on the refuge would indicate that this and/or *B. c. hutchinsi* are of frequent occurrence.

One *B. c. minima* was observed on the refuge April 8, 1942. Observation at about 250 feet with

8× glasses, and size comparison with a female Mallard and a number of *B. c. canadensis*, substantiate the identification. The divided cheek patches were also noted. This is the first published record for the state of this subspecies.

*Chen hyperborea*. Snow Goose. The writer was surprised to see two of these birds on the Bosque del Apache Refuge, May 25, 1942, a date on which they should normally have been in the vicinity of the Arctic Circle. The refuge manager, A. D. Campbell, was with the writer at the time, and also identified the birds, which appeared to be normal. They were not seen subsequently.

*Charadrius alexandrinus*. Snowy Plover. Two pairs were observed frequently on the Bosque del Apache Refuge during the period May 22 to June 1, 1942. This is the second locality in New Mexico at which the Snowy Plover has been found. It is not known if the birds were breeding, although their actions led me to believe so.

*Erolia fuscicollis*. White-rumped Sandpiper. A flock of 16 was seen on the Bosque del Apache Refuge, May 22, 1942, and a flock of 22 on May 25, 1942. On the latter date, I saw a Duck Hawk (*Falco peregrinus*) kill one of the sandpipers, an action that took place less than 300 feet from me. The hawk carried the specimen away. These are apparently the only records of the White-rumped Sandpiper for the state. Woodhouse's records mentioned by Mrs. Bailey pertain to *E. bairdii*, as shown by Coues (Proc. Acad. Nat. Sci. Phila., 1866, p. 97). Henry's records, also mentioned by Mrs. Bailey, very likely pertain to *E. bairdii*, since they were published before *E. bairdii* was described.

*Erolia alpina*. Red-backed Sandpiper. Two individuals were seen regularly with a flock of Dowitchers, from January 8 to February 23, 1941, on the Bosque del Apache Refuge. These comprise the first records of the species for New Mexico.

*Limnodromus griseus*. Dowitcher. A flock of about 25 was present and noted on the Bosque del Apache Refuge from January 7 to March 9, 1941. Flocks numbering up to 100 birds were seen there from March 19 to May 1, 1942. But five records previously existed of the Dowitcher in New Mexico, and none of them was a wintering record.

*Larus philadelphia*. Bonaparte Gull. One was seen on the Bosque del Apache Refuge, April 14, 1942, the first record for the state.

*Asio wilsonianus*. Long-eared Owl. One was found freshly dead near Bosque del Apache Refuge headquarters, November 26, 1941, cause of death being a three-inch spine from a cactus (*Opuntia* sp.) driven into the head just above the right eye to a depth of half an inch beneath the skull. Apparently the owl was pursuing one of the small rodents which make their homes in the cactus beds and came too close.

*Dryobates villosus leucothorectis*. Hairy Woodpecker. This bird, normally found only in the high Upper Sonoran Zone and above throughout the year, is resident in at least part of the Lower Sonoran Zone in the Rio Grande Valley. A nest twenty feet from the ground in a cottonwood tree was under observation from May 24 to June 7, 1942, near San Antonio; on the latter date young were about to leave the nest. An adult male was taken near Socorro, December 28, 1941.

*Tyrannus tyrannus*. Eastern Kingbird. A female taken two miles south of San Antonio, May 19, 1942, is the first record of the species for the Rio Grande Valley below Santa Fe, as well as the southwesternmost record for the state.

*Sayornis nigricans semiatra*. Black Phoebe. This species was seen along the Rio Grande near San Antonio, March 25 and 30, 1942, and a female was taken near San Antonio, April 6, 1942. These are the northernmost records for the state.

*Empidonax griseus*. Gray Flycatcher. One was taken near San Antonio, April 12, 1942, apparently only the third published record for the state.

*Pyrocephalus rubinus*. Vermilion Flycatcher. An adult male was seen April 16, 1942, on the east side of the Rio Grande near San Antonio. This record is the northernmost for the Rio Grande Valley and New Mexico.

*Hirundo rustica*. Barn Swallow. This swallow nests commonly in the Rio Grande Valley; spring arrival on the Bosque del Apache Refuge in 1942 was March 25. The first winter records of the species in the state were obtained on the refuge February 5, 10, and 11, 1941, on which dates single birds were noted, all very likely the same individual.

*Cyanocitta stelleri diademata*. Steller Jay. Although a permanent resident of the Transition Zone and above, this jay was noted in the valley during winter: a flock of eight seen near Socorro, December 28, 1941, and an adult male taken near San Antonio, January 2, 1942.

*Aphelocoma californica woodhouseii*. California Jay. A permanent resident of the Upper Sonoran Zone, this species was noted frequently during winter in the Lower Sonoran Zone about Socorro and San Antonio, from November 26, 1941, to May 19, 1942. A female was taken near San Antonio, March 7, 1942.

*Pica pica*. Black-billed Magpie. Noted frequently as a wintering bird in the San Antonio-Socorro

vicinity, in 1941-42 as well as 1940-41, and seen as late as March 9, 1942. Previously, records of winter occurrence, aside from two casual records, reached only as far south as Isleta in Bernalillo County.

*Corvus brachyrhynchos*. Crow. Large numbers of Crows invaded the Rio Grande Valley during the winter of 1941-42, being seen from December 29 to March 31, and from Albuquerque south to Las Cruces, Dona Ana County. The previous winter, a flock of 19 seen February 23 on the Bosque del Apache Refuge was the only record obtained.

*Psaltriparus minimus*. Bush-tit. This is a typical Upper Sonoran bird in New Mexico, where it is common in the piñon-juniper association. To my knowledge, it was previously unknown as a breeding species in the Lower Sonoran Zone. A nest was found on the Bosque del Apache Refuge, March 25, 1942, about 12 feet above ground in a small willow. This nest was inspected frequently for eggs, but although the two "parent" birds scolded vociferously whenever I was in the vicinity of the nest, apparently no eggs were laid, and the nest was finally abandoned. These birds were last seen on April 27.

*Sitta carolinensis*. White-breasted Nuthatch. Although breeding evidence was lacking, this bird was noted in the bosque of the San Antonio vicinity during most of my months in the area, from November to June. This is a species regarded as normally breeding in the well-wooded Upper Sonoran Zone, the Transition Zone, and higher. An adult male collected near San Antonio, December 23, 1941, has been identified by Miller as *S. c. tenuissima*, with the following comments (letter, April 2, 1945): "the White-breasted Nuthatch one would think should belong to the race *nelsoni*, but its characteristics of bill shape and length leave me no alternative but to place it with the Great Basin race. These forms of nuthatch, which are not too well differentiated, might of course have occasional aberrant individuals that look like members of another race population."

*Turdus migratorius propinquus*. Robin. A winter visitant to the bosque about San Antonio and Socorro. It breeds there in small numbers; a juvenile was collected near San Antonio, May 31, 1942, and numbers of adults were seen during May and June, 1942. The Robin in the inland southwest usually breeds only in the Upper Sonoran Zone (as at Albuquerque) and higher. The only other Lower Sonoran record I am aware of is that mentioned by Mrs. Bailey in reporting a record by Ligon, who found young out of the nest near Palomas Springs, Sierra County, June 11, 1913. I presume the plant association is much the same there as it is near San Antonio and Socorro.

*Hylocichla guttata auduboni*. Hermit Thrush. A male was taken in Water Canyon of the Magdalena Mountains, low Transition Zone, Socorro County, May 3, 1942.

*Sialia mexicana bairdi*. Mexican Bluebird. This is another species previously regarded as breeding only in the high Upper Sonoran Zone (tall piñons) and above, but found breeding in the bosque near San Antonio, where a family was seen May 31, 1942, including a juvenal male which was collected.

*Poliioptila caerulea*, Blue-gray Gnatcatcher, and *Poliioptila melanura*, Black-tailed Gnatcatcher. Frequent observations on the Bosque del Apache Refuge indicate that *melanura* is a permanent resident in small numbers of at least this part of New Mexico, whereas *caerulea* is a migrant only, spring arrival being about April 10 and spring departure about May 15.

*Phainopepla nitens lepida*. Phainopepla. A male was taken about eight miles north of Valverde, Socorro County, May 26, 1942. A male and a female were seen June 3, 1942, and a male on June 9, 1942, on the Bosque del Apache Refuge. These are the northernmost records for New Mexico, and the northeasternmost for the United States.

*Sturnus vulgaris*. Starling. This bird has been reported from the Rio Grande Valley by other observers (Condor, 42, 1940:86; *ibid.*, 43, 1941:197). To these records, I wish to add that I saw it often on the Bosque del Apache Refuge during the winter of 1940-41, in flocks numbering as high as 58 individuals. However, I did not see it the following winter.

*Vireo bellii*. Bell Vireo. I noted individuals on the Bosque del Apache Refuge May 7 and 31, 1942, and took a male near San Antonio, May 24, 1942, which was identified by Phillips as *V. b. medius*. This is the first record for the state of *medius*. The only previous recorded occurrence of the species in the state is in the Gila River valley in Grant County, where *V. b. arizonae* has been found.

*Vireo solitarius plumbeus*. Solitary Vireo. This is still another Transition Zone species found breeding commonly in the bosque near San Antonio. A juvenile just out of the nest was found and photographed June 7, 1942. A male was collected near San Antonio, May 24, 1942.

*Vermivora luciae*. Lucy Warbler. I saw four and collected one of them (a male) near San Antonio, April 8, 1942. The species was seen on subsequent dates in the same vicinity, including a total of 14 individuals June 7, 1942, and undoubtedly nested, although I found neither nests nor young. These are the first records of this warbler anywhere on the Atlantic drainage.

*Dendroica coronata hooveri*. Myrtle Warbler. Eight were seen, including one male taken, in the bosque near San Antonio, April 8, 1942. This is but the second locality in which the species has been found in New Mexico.

*Cardellina rubrifrons rubrifrons*. Red-faced Warbler. Mrs. Bailey mentions no record of this

warbler from farther north and east than northeastern Grant County. A male seen April 19, 1942, others seen April 28 and May 3, 1942, and a male taken the latter date, all in Water Canyon of the Magdalena Mountains, extend its known range considerably to the north and east.

*Cassidix mexicanus*. Great-tailed Grackle. Observed in small numbers on the Bosque del Apache Refuge throughout the winter of 1940-41, but not recorded during the following winter. A few were seen from March 24 to June 2, 1942, near San Antonio, including females taken April 3 and May 15.

*Spinus psaltria*. Arkansas Goldfinch. Fairly common resident in the Socorro-San Antonio vicinity, undoubtedly nesting in the bosque. Two males taken near San Antonio, June 7, 1942, have been identified by Miller as "*S. p. psaltria* intergrade *S. p. hesperophilus*." A male taken at the same place February 23, 1941, he labels "*S. psaltria* apparently *hesperophilus*." In a letter dated April 2, 1945, Miller has this to say regarding these goldfinches: "The Arkansas Goldfinches . . . it would seem should be of the race *psaltria*. However, they seem to be adult males and as such have the greenish color of the western form except for one which is, in a sense, intermediate. Actually I think the differentiation of these races is unsatisfactory. I am not at all sure that the black backed condition of the adult male is uniform in the eastern race. Probably there is a sort of phase situation and the black type is merely predominant in the eastern population, and essentially absent in the western. All of this makes one quite uncertain in the values to be placed upon identification of individual specimens."

*Pipilo maculatus*. Spotted Towhee. This is another species usually regarded as breeding, in the inland Southwest, only in the Upper Sonoran Zone and above; but it is found throughout the year in the San Antonio area. Mrs. Bailey has recorded its breeding along the Rio Grande at Mesilla Park in Dona Ana County, suggesting that the species breeds along the Rio Grande wherever the "bosque" occurs.

*Aimophila ruficeps scottii*. Rufous-crowned Sparrow. Seen occasionally in the Little Chupadera Mountains near San Antonio, where it is undoubtedly resident, a new location for New Mexico. An adult male taken December 6, 1941, has been examined by Miller, who called it *A. r. scottii*, "but coloration, beneath, atypical."

*Spizella arborea ochracea*. Tree Sparrow. Seen on the Bosque del Apache Refuge, January 23 and 28, 1942; a flock of ten, including two males taken, seen near San Antonio, March 2, 1942. These are the southernmost records for the state, and also the first Lower Sonoran record for the United States. Gaut's sight records for October 10-25, 1902, from Corona, Lincoln County (*cf.* Mrs. Bailey), would appear to be open to suspicion because of the extreme earliness of the dates.

*Spizella passerina*. Chipping Sparrow. An adult was seen feeding a juvenile just out of the nest near San Antonio, June 7, 1942. The species hitherto has not been found breeding in the Lower Sonoran Zone in New Mexico.

*Passerella iliaca*. Fox Sparrow. One was seen on the Bosque del Apache Refuge, December 15, 1941, apparently but the second locality in the state where this bird has been found, as well as the first winter record.

This paper, I believe, demonstrates the fact that much field work remains to be accomplished in New Mexico before a well-rounded picture of the state's bird life may be presented. Many data concerning breeding areas, winter ranges, migration, and zonal interrelationships are lacking. Mrs. Bailey's "Birds of New Mexico" has filled the need for a general guide, but insufficient data had been obtained by the time of its publication to permit a full account of the birds of the state. Little has been published since the appearance of Mrs. Bailey's book.

In support of my statement concerning lack of data, I point out that the present paper contains the first published records for the state of at least three full species and four subspecies; the second published records for the state of two species, and the second locality records for the state of three species; as well as several first wintering records and examples of range extension.

A second point illustrated by the above records is that species regarded as characteristically breeding in the Upper Sonoran and Transition zones breed locally in the Lower Sonoran Zone, particularly where the three zones occur within a few miles of one another, as they do in the vicinity of San Antonio. Examples of this are *Dryobates villosus*, *Turdus migratorius*, *Sialia mexicana*, and *Virgo solitarius*. I do not believe that this phenomenon has been mentioned specifically before in the literature.

*Fish and Wildlife Service, Parker, Arizona, June 5, 1946.*