NOTES ON SOME BIRDS OF SONORA, MEXICO

By JOHNSON A. NEFF

The writer, accompanied by George W. Peterson of Nogales, Arizona, spent the period from May 25 through July 18, 1942, in a study of the abundance and distribution of the White-winged Dove, *Zenaida asiatica mearnsi*, in Sonora, covering some 4,500 miles of roads and desert trails. No collecting was possible, and accordingly only sight records were made.

Our field notes have been reviewed since the recent issuance of A. J. van Rossem's distributional list of birds of Sonora (Occas. Papers Mus. Zool., Louisiana State Univ. No. 21, 1945:1-379). A short list of selected observations was sent to him and at his suggestion has now been revised and prepared for publication. Effort has been made to select observations which will extend known ranges, or those which have some other bearing on natural history.

Field work in Sonora rapidly brings the student to an appreciation of van Rossem's statement that "there is no existing map of Sonora which can be considered accurate in all of its features." The place names used in these notes are those which appear on an official map of Sonora distributed by the Secretaria de Agricultura y Fomento, D. F., Mexico, a map drawn on a scale approximating 10 kilometers to $\frac{3}{4}$ inch and printed in four sections. Localities described in the following list are those which are not found in any standard atlas. They are tabulated with approximate latitude and longitude or other description.

Agua Caliente and Valle de Agua Caliente: east of Guaymas, Yaqui River drainage, 28° 0'-28° 30' N, 110° 0'-110°30'W.

Cocospera: about 110°40', 30°50', on Rio Babasac northeast of Imuris.

Cornelio: on Hermosillo-Nogales highway about 130-135 miles south of Nogales.

El Tecolote Rancho: about 15 km. east of La Colorada.

Imuris: on the railroad about 40 km. north of Magdalena.

La Colorada: on Mazatan highway east of Hermosillo; not on my maps.

Misa: about 110°35', 28°20'.

Moreno: on the railroad, at intersection with 28°30', south of Hermosillo.

Ocuca: on Altar-Santa Ana road, near intersection 110°30' and 30°30'.

Pozo Crisanto: 111°15' and 29°45'; 12 miles west of Carbo.

San Jose: village on Mazatan highway east of La Colorada; not on my map.

San Manuel: 10 km. northeast of Ocuca.

Santa Ana: on highway and railroad, 40 km. southwest of Magdalena.

Ardea herodias. Great Blue Heron. A single bird was seen at a reservoir at Cornelio, on June 6. This seems to be somewhat south of van Rossem's listed locations.

Mycteria americana. Wood Ibis. A flock of about 250 birds was seen soaring high in the air over Pozo Crisanto on June 23; this location is far inland and the flock was apparently headed north toward Arizona.

Ajaia ajaja. Roseate Spoonbill. One bird was watched with binoculars for fully two hours at ranges as low as 50 yards on June 1 on a reservoir some six miles west of the village of Moreno, well inland from any location listed by van Rossem.

Anas acuta. Pintail. Two birds were seen on June 13 on a large lake several miles northeast of the town of Cananea; at this date these birds should have been nesting.

Buteo albicaudatus hypospodius. White-tailed Hawk. We camped for the week beginning May 25 near the village of Agua Caliente close to a spring and small reservoir, and each day as many as four of these hawks could be seen soaring overhead at the same time. This location is considerably east and north of the locations listed by van Rossem.

Buteo albonotatus. Zone-tailed Hawk. Three nests were found, the first on June 14 on the Rio Babasac southwest of Cocospera in an inaccessible location. The second was on June 22 at Pozo Crisanto; it contained one downy young. The third was near El Plomo on July 15, where a juvenile able to fly short distances was banded. The latter record is farther west than van Rossem's stations. Jan., 1947

Buteo nitidus maximus. Gray Hawk. Two pairs were present on El Tecolote Rancho east of La Colorada in early June; one of each pair had been killed by the rancher. One was still fresh enough to examine on June 3, and in its gullet was found the remains of a small heron or bittern including one foot which bore the comb on the toe. It was said that no free water outside wooden or concrete tanks was to be found within ten miles. I photographed the nest and two eggs of one of these pairs (fig. 5).

Buteo swainsoni. Swainson Hawk. Common everywhere. This species is included because of a pair found nesting along a road several miles west of Pozo Noriega on June 20; one of the pair was ex-



Fig. 5. Nest and eggs of Gray Hawk, Butco nitidus maximus, at Rancho El Tecolote, near La Colorada, Sonora; June 3, 1942.

tremely light in plumage, the other as melanistic as the species ever becomes. Together they made a strange contrast.

Parabuteo unicinctus. Harris Hawk. A family, two adults and four young, frequented one large tree near the reservoir at Cornelio, and on June 23 remains of seven White-winged Doves were found close to the tree. Seen also at many other points.

Lophortyx douglasii. Douglas Quail. Two birds were seen for a brief period some eight miles west of Moreno on June 1.

Colinus virginianus ridgwayi. Masked Bob-white. A covey of some thirty-odd birds was watched for some time as it fed along the road near us on June 1, a few miles south of Punta Agua, in the north end of the Valle de Agua Caliente.

Zenaida asiatica mearnsi. White-winged Dove. The largest nesting colony of this species that the writer has ever been privileged to observe was found on July 11 in the dense jungle-like thickets between Pitiquito and Caborca, largely on the property of Señor M. D. Varela; this colony numbered several thousand pairs.

Scardafella inca. Inca Dove. We were greatly surprised when we failed to find this dove in Sonora as commonly as in Arizona. The only ones seen were in Altar village on June 15 and 16, and on July 8, 9, and 10.

Coccyzus americanus. Yellow-billed Cuckoo. One bird was seen on June 14 along the Rio Babasac south of Cocospera. Another was seen and a nest located in the wilderness forest of giant mesquite north of Ocuca, close to San Manuel, on June 18.

Bubo virginianus. Horned Owl. A pair of adults and two flying young were found in a mesquite thicket across the Altar River from the village of Altar; they were seen on June 15, 16, and on July 8, 9, and 10.

Chloroceryle americana. Green Kingfisher. A single bird was seen often, on June 13 and 14, feeding alongside our camp on the bank of the Rio Babasac several miles southwest of Cocospera. Progne subis. Purple Martin. Easternmost point of observation was in the lower Rio Babasac canyon about ten miles northeast of Imuris, somewhat east of giant cactus range, on June 13 and 14.

Parus schateri. Mexican Chickadee. Several seen along the Rio Babasac northeast of Imuris on June 13 and 14, apparently well south of the range given by van Rossem.

Parus wollweberi. Bridled Titmouse. Several were seen working about the river bottom brush along the Rio Babasac between Cocospera and Imuris on June 14 and 15.

Icteria virens. Chat. Heard singing along the Rio Babasac, June 13-15, between Cocospera and Imuris; this point is well south of most of van Rossem's records.

Cassidix mexicanus. Boat-tailed Grackle. A few to several birds were seen at a number of points, almost all villages or towns, and all activity seemed to center around groups of palm trees from which young birds could be heard calling. In such habitats they were seen in Hermosillo, La Colorado, San Jose, Magdalena, Santa Ana, Imuris, Altar, Pitiquito, and Caborca. The only rural location where they were found was about a ranch in the north end of the Valle de Agua Caliente on May 27.

Passerina versicolor. Varied Bunting. This bunting was found commonly about a water trough on a ranch near the north end of Valle de Agua Caliente on May 26 and 27, and one was later seen at Pozo Crisanto.

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