

NOTES ON FIFTEEN SPECIES OF BIRDS FROM THE SAN FRANCISCO MOUNTAIN REGION, ARIZONA

By LYNDON L. HARGRAVE

Bird studies in the San Francisco Mountains, Arizona, have been few and sporadic and no year-'round records have been kept. Most observers contributing to the ornithology of the region have been members of early railway surveys or representatives of institutions from other states.

The steep vertical sides of The Peaks, with zones from the Upper Sonoran to the Arctic, which offer most excellent opportunity for the study of many problems that otherwise would require prohibitive time and expense, the many mountain lakes which at seasons teem with wild fowl but which have practically been unknown since the days of Mearns, and the nearness of the Painted Desert of the Little Colorado make this region extremely attractive to the bird student. The San Francisco Mountains are historic grounds and the field-worker is constantly reminded of Woodhouse and of C. Hart Merriam and of the valuable contributions made by them to biological science.

Since my duties center about Flagstaff during the winter months, and take me into the surrounding country at other seasons, opportunities for daily observations of birds, often for many weeks in a limited region, have resulted in the accumulation of many data, a small portion of which is given herein. These records are miscellaneous and are outside of definite problems, but, nevertheless, are unique for the region. The numbers of the specimens listed are those of the Museum of Northern Arizona.

Ardea herodias treganzai. Treganza Blue Heron. On May 3, 1931, one was seen at Marshall Lake (elevation 7133 feet), twelve miles southeast of Flagstaff. Jenks (Technical Bull. no. 5, Grand Canyon National Park, Ariz., 1932, p. 8) lists four other records for the San Francisco Mountain region.

Buteo borealis krideri. Krider Red-tailed Hawk. Near Doney Park (Transition Zone, elevation 6500 feet), at the east foot of Elden Mountain, on October 12, 1931, about twelve buteos were noted along the highway for about ten miles. All were much lighter in color than *B. b. calurus* so common in the region. One of these hawks was collected, no. 2652, and sent to Mr. T. T. McCabe, Museum of Vertebrate Zoology, Berkeley, for identification, who stated by letter that this specimen was also examined by Swarth. Mr. McCabe writes in part: "He (Swarth) and I have both taken identical birds in central British Columbia. These are the only immatures which are as light as yours in two cases full in this Museum. Swarth has seen equally light breeding birds from the north-central states and suspects that *krideri*, which he thinks was named from a similar form, stretches thence northwesterly, as many forms do. This is why I called your bird *krideri*, a very doubtful designation." This seems to be the only specimen of this phase from the State. With the exception of *B. regalis*, I have not observed other light buteos in the region.

Pandion haliaëtus carolinensis. Osprey. The Osprey unquestionably is at times found along the Little Colorado River, Arizona, as the Hopi Indians are familiar with the species; but I have been unable to find published records of the occurrence of this bird in the Transition Zone of the plateau of northern Arizona. On the plateau, however, there are many lakes that abound in fish and the Osprey should be of fairly common occurrence. On May 3, 1931, I saw one of these birds come in to Marshall Lake, make a catch, and immediately leave the vicinity. Recently I have examined a mounted Osprey which was shot by D. M. Kiltridge in the timbered section of Oak Creek, about 20 miles south of Flagstaff, on November 3, 1931.

Catoptrophorus semipalmatus inornatus. Western Willet. On April 24, 1931, a lone Willet was observed for some time on the shore of Marshall Lake. I was able to approach quite close to the bird and study it through glasses. On stalking closer it flew a short distance, thus enabling me to study it on the wing, when its markings were quite striking. This, I believe, is the third specific record for the State, and

though only a sight record I feel certain of the identification. The species has not been previously reported from the plateau of northern Arizona.

Columbigallina passerina pallescens. Mexican Ground Dove. This species was observed at Grand Canyon, Arizona, on October 18, 1931, by C. A. Bryant of San Francisco (Grand Canyon Nature Notes, vol. 6, 1932, p. 28). His appears to be the first record for northern Arizona. On the 30th of the same month I collected one, no. 2657, which I caught in a government sparrow trap at Coyote Range (Transition Zone, elevation about 7200 feet), about two and one-half miles northwest of Flagstaff. This second record for the plateau is, therefore, the first record for the San Francisco Mountain region.

Megaceryle alcyon caurina. Western Belted Kingfisher. Though considered a fairly common migrant throughout the State, I know of only one other record from the San Francisco Mountain region, that of Jenks (Technical Bull., no. 5, p. 16). On April 24, 1931, one was seen by me at Marshall Lake, and on May 3 of the same year, Mr. Jenks and I were surprised to find one in quaking aspens (*Populus tremuloides aurea*) bordering a watering hole at the England Ranch in Hart Prairie (elevation 8400 feet) in the Canadian Zone on the southwest slope of the San Francisco Peaks. The bird kept up an incessant clattering and though we watched it for some time, it did not leave the trees. The pool, commonly used for watering stock, was muddy and at this season could contain little of animal life. There are no running streams in these mountains and even springs are few and widely scattered.

Several records are reported from other sections of the plateau (Jenks, *loc. cit.*), and McKee (Preliminary Check List of Birds of Grand Canyon, 1931, p. 6) on the authority of Vernon Bailey reports nest holes on the west side of Bright Angel Creek (Lower Sonoran Zone). This appears to be the most definite evidence yet recorded of the species breeding within the State.

Sayornis nigricans. Black Phoebe. On April 17, 1931, I observed a single bird flycatching about a pool of water under a cliff below Lake Mary dam. Jenks (*loc. cit.*, p. 18) reports nesting records from the bottom of the Grand Canyon and a summer record from Flagstaff. I have been unable to find other records for the plateau region.

Corvus corax sinuatus. American Raven. Though this bird is considered to be a common species throughout the State, I have surprisingly few records for the Transition Zone of the plateau. A single bird was recorded at Coyote Range on December 31, 1930, and two were noted at the same place on March 3, 1931. On April 24, 1931, a flock of twelve was seen feeding on carrion at Marshall Lake, and two were observed at Walker Lake (elevation 8500 feet) on June 28 of the same year. Not again noted until March 9, 1932, when three were observed at Coyote Range.

Corvus brachyrhynchos hesperis. Western Crow. The scarcity of published records of migration for the State will warrant the following details. On April 24, 1931, a flock of six was seen at Marshall Lake. The following September about twenty were noted near Flagstaff during the last week of the month. None was seen by me during the summer months. On March 9, 1932, a flock of about twenty-five was seen in pine woods on the outskirts of Flagstaff; on the 10th, a flock of twelve was observed at Coyote Range; and, on the 11th, several small flocks were noted. On the 12th several Crows were seen to rise from a pine thicket north of Flagstaff. I attempted to count them but after counting 50, the main body of the flock arose. I should judge there were at least 150 individuals. Two other small flocks were later seen near the same place. Common in the same region on the 13th. Two were seen at Coyote Range on the 14th; one, no. 2709, was collected. Singles or pairs were observed on the 15th, 16th, and 17th. After this date until this writing one or two pairs have been seen several times a week at Coyote Range or vicinity. All flocks observed were flying west, a necessary direction of flight in order to skirt the high mountains. I was informed that Crows were common five miles east of Flagstaff during this same period.

Certhia familiaris montana. Rocky Mountain Creeper. A summer visitant to the San Francisco Mountains; one winter record from northern Arizona (Swarth, Pacific Coast Avifauna No. 10, 1914, p. 76). At Coyote Range, December 19, 1930, three Creepers were seen traveling with a large flock of Pygmy Nuthatches. Another Creeper was seen in the same locality on April 13, 1931. These are the only records I have for this bird though Jenks (*op. cit.*, p. 21) states that this Creeper is a permanent resident in the San Francisco Mountains but does not give his evidence for the statement.

Agelaius phoeniceus fortis. Thick-billed Red-wing. On December 12, 1931, I saw a small flock of Red-wings at Coyote Range; there was much snow on the ground and the temperature was below freezing. At the same place, on the 13th, I caught a flock of eight, presumably those seen the day before. A male, no. 2664, and a female, no. 2665, were collected and the others were banded. These specimens have been identified by Mr. McCabe. This, I believe, is the first winter record from the plateau region. The species is uncommon in the region (Ridgway, Birds of North and Middle America, Part II, 1902, p. 339) and though Swarth (Condor, xxvi, 1924, p. 187) recorded several small flocks on Deadman's Flat north of the San Francisco Peaks in the fall of 1922, none was observed by me in that region this past fall. On March 4, 1931, several Red-wings were seen at Davenport Lake (Transition Zone) about 25 miles west of Flagstaff, and though Jenks (*op. cit.*, p. 26) reports numerous spring and fall records for the general region I know of no other specimens.

Passerina amoena. Lazuli Bunting. In 1914, Swarth (Pacific Coast Avifauna No. 10, p. 61) was unable to cite records of the occurrence of this species in north-eastern Arizona. On May 16, 1931, several of these birds were seen at Indian Gardens (Lower Sonoran Zone), Grand Canyon National Park (McKee, Grand Canyon Nature Notes, vol. 5, 1931, p. 83), and Jenks (Tech. Bull. no. 5, p. 26) records them as breeding at that place. The first record for the Transition Zone of the plateau and for the San Francisco Mountains, I believe, is the record of three pairs seen by me at Coyote Range on July 18 where they were observed feeding on "oats in the milk." Ten were seen in the same oat patch on the 25th and two on August 1. These observations were made on Saturdays and Sundays, and as I was away during other days I presume that the birds were there on the intervening dates.

Loxia curvirostra bendirei. Bendire Crossbill. This species is not included in Swarth's Distributional List of the Birds of Arizona (Pacific Coast Avifauna No. 10, 1914). The first specimen for the state seems to be one taken by G. E. Sturdevant on the South Rim, Grand Canyon National Park, during the fall of 1927 (McKee, Preliminary Check List of the Birds of Grand Canyon, 1931, p. 14). The second record appears to be a male taken by Dr. Alden H. Miller on June 25, 1931, in the Kaibab Forest, north of the point of first capture (Condor, xxxiv, 1932, p. 99). A male, no. 2655, identified as of this subspecies by Mr. McCabe, was taken by me at Coyote Range on October 26, 1931. There were about twenty-five birds in the flock, which included both sexes. Crossbills have been numerous in the locality since the first week of October, but all other specimens taken were *L. c. stricklandi*. On March 21, a flock of about fifteen was observed. They were heard singing for the first time this year. Last noted April 10.

Junco oreganus thurberi. Thurber Junco. A Junco, number 2666, taken by me at Coyote Range on December 3, 1931, has been identified as of this subspecies by Dr. Alden H. Miller. This appears to be the first specimen of this bird taken on the plateau. Dr. Wetmore has informed me by letter that one specimen collected by Coues at Prescott, Arizona, has been identified by Dr. Herbert Friedmann as of the race *thurberi*. Until this year the Prescott record seems to have been the most northerly record for the State.

Spizella arborea ochracea. Western Tree Sparrow. In 1914 the only published records of the occurrence of this species within the State refer to two specimens taken by Kennerly in the Valley of the Little Colorado River and to a statement by Henshaw, who reported it, on the authority of Bendire, as of occasional occurrence in winter in the vicinity of Tucson (Swarth, Pacific Coast Avifauna No. 10, p. 54).

Kennerly was a member of Lt. A. W. Whipple's party which, in 1853, surveyed the country in the neighborhood of Flagstaff for a feasible railway route to the Pacific. A review of Whipple's report (Reports of Explorations and Surveys, 1853-6, III, 1856, chapters IX and X) shows that the time between December 13 and 20 was spent by the main body of the party, which included Kennerly, in working from a point identified as Winslow to the junction of Canyon Diablo and the Little Colorado River where the party camped on the 20th. The first of these specimens, taken on the 18th, was, therefore, taken some distance to the west of Winslow, while the second, taken on the 20th, must have been collected in the neighborhood of Leupp, on the edge of the San Francisco Mountains Volcanic Fields, only a few miles from the base of the San Francisco Mountains.

In the late afternoon of December 12, 1930, I saw three sparrows which I believed to be this species, but the light was too bad for definite identification. In the morning of the 15th, however, I again saw three sparrows which I was able to approach within about twenty feet and identify with certainty as this species. The birds were only about 200 feet from the point where the sparrows were seen on the 12th. It is important to note, in this connection, that no other species of sparrow has been recorded from this region during the winter months.

I met with the Tree Sparrow again on November 18, 1931. On making the rounds of my traps I found one in a house trap with several Juncos. The bird (no. 2658) was collected and has been identified by Mr. McCabe. I had not seen the bird before capture in spite of the fact that the trap was within twenty feet of my office window and I feel almost certain that the bird was traveling alone. On the 21st a Tree Sparrow was observed feeding about the office and trap. There was much snow on the ground, and, with the exception of the feeding station and the tops of a few weeds, all seeds were buried. These two birds were the only individuals of this species which were seen by me this past winter.

Jenks (Technical Bull. no. 5, p. 29) records numerous spring records for the San Francisco Mountains, though no details as to date and manner of occurrence are given.

Museum of Northern Arizona, Flagstaff, April 15, 1932.