

Western Willet (*Catoptrophorus semipalmatus inornatus*). An adult male was collected by Stevenson at Vail Lake, 8 miles southeast of Flagstaff, on August 5. Hargrave (Condor, vol. 35, 1933, p. 76) lists eight published records of this species for Arizona, but few refer to specimens collected.

Lesser Yellow-legs (*Totanus flavipes*). Two were seen, and one collected, by Stevenson on July 29, at a marsh 4 miles south of Oraibi, Navajo County. These birds were found with three Greater Yellow-legs (*Totanus melanoleucus*). The Lesser is rare in Arizona. There is one published record for northern Arizona (Hargrave, *op. cit.*, p. 76).

Wilson Phalarope (*Steganopus tricolor*). The Wilson Phalarope is an uncommon bird in Arizona and few records have been published. A flock of thirty was seen resting on Vail Lake, August 5, when one female was collected by Stevenson.

Arkansas Kingbird (*Tyrannus verticalis*). The common summer resident kingbird of the high central and northern portions of Arizona is *Tyrannus vociferans*. Most kingbird records for the San Francisco Mountain and Grand Canyon regions thus refer to the Cassin Kingbird. On August 1, we found several Arkansas Kingbirds in cottonwoods at Tapaan Springs, 3 miles west of Cameron Bridge, Coconino County, 4150 feet altitude, low Upper Sonoran Zone. An immature female was collected by Stevenson.

Lucy Warbler (*Vermivora luciae*). We were surprised to find, on July 31, a Lucy Warbler in Doney Park, nine miles northwest of Flagstaff, 6750 feet, Transition Zone. The bird, an immature female, was collected by Stevenson. The only other record for this bird in central or northern Arizona, north of Fort Whipple, is that of Jenks (Grand Canyon National Park, Ariz., Technical Bull. No. 5, 1932, p. 8) who cites one sight record for spring from the bottom of the Grand Canyon.

Brewer Sparrow (*Spizella breweri breweri*). Scarce in summer in Arizona and most breeding records are indefinite. Brewer Sparrows were found quite commonly on July 29 in a juniper-sagebrush association north of Deadman Flat, 41 miles northwest of Flagstaff, Upper Sonoran Zone. At least twenty birds were seen. An immature female and an adult male were collected by Stevenson. The species may have nested in that locality.—RANDOLPH JENKS, *Arizona State Museum, Tucson, Arizona*, and JAMES STEVENSON, *Wildlife Division, National Park Service, Washington, D. C., July 2, 1936*.

New Birds Recorded from Bryce Canyon National Park, Utah.—Between October 7 and 11, 1935, the writer did biological work in Bryce Canyon National Park, southwestern Utah, with C. C. Presnall, Park Naturalist, and A. E. Borell, Regional Wildlife Technician. Later, on November 23, he visited Bryce again with C. C. Presnall and made further observations. The following birds new to the park were recorded. All specimens collected are now in the Zion National Park museum.

Buteo lagopus s. johannis. American Rough-legged Hawk. A single individual was seen perched on a telephone pole a short distance west of the park boundary on November 23. Owing to the wide-ranging habits of the species, this is considered to be good basis for including it in the park list, for it undoubtedly occurs there during migration. Presnall did not include it in his list of the birds of Zion National Park (Utah Acad. Sci. Arts and Letters, vol. 12, 1935). It is considered to be uncommon in the region.

Buteo regalis. Ferruginous Rough-leg. On October 8 a rather small individual of this species, probably a male, was seen perched in the top of a tall dead yellow pine in Swamp Canyon, elevation 7300 feet. The next day it, or another one, was seen in the same place, but efforts to collect it were fruitless. The Ferruginous Rough-leg is common throughout southern Utah. It is seen frequently at Cedar Breaks National Monument, elevation 10500 feet, in all seasons except winter, and it is common in the region of Zion National Park. On April 9, 1936, I saw one at Panguitch Lake, elevation 7500 feet, when the lake was still frozen and the ground covered with snow. Three specimens were taken July 11, 1936, in the cedar-piñon pine belt in the foothills of the Iron Mountains west of Cedar City. It probably breeds in all of the mountains of the State.

Capella delicata. Wilson Snipe. On October 10 one was flushed from the edge of Campbell Canyon spring, elevation 6800 feet. The following morning, when the spring was visited, the snipe was again flushed, only to drop out of sight in a brushy place about one-fourth of a mile north, where it could not be located. Campbell Canyon spring has a small but permanent flow of water, which has never been developed for domestic purposes, so that it is surrounded by a marshy place perhaps fifty feet in diameter. The edge of this marsh is thickly grown up with brush consisting of birch (*Betula fontinalis*) and cottonwood (*Populus angustifolia*). Wilson Snipe are common in suitable places in southern Utah throughout the fall and winter.

Dryobates pubescens leucurus. Batchelder Woodpecker. These woodpeckers were seen several

times in cottonwood trees in Swamp Canyon at an elevation of 7300 feet. A male and a female were collected on October 8 by Long and Borell. The Batchelder Woodpecker is not common over most of southern Utah. I have recorded it only a few times at elevations ranging from 3900 to 7500 feet, at Springdale, Beaver, and Panguitch Lake.

Aphelocoma californica woodhousei. Woodhouse Jay. Although not as common as the Long-crested Jay (*Cyanocitta stelleri diademata*), the Woodhouse Jay occurs in Swamp Canyon, where it was seen several times. A female was taken by Long on October 8. This species is common in the oak belt throughout the region.

Psaltriparus minimus plumbeus. Lead-colored Bush-tit. A small flock was seen in Campbell Canyon on October 10, but they were not recorded at any other time. The elevation of this place is approximately 6600 feet. Bush-tits are very common all over southwestern Utah, and occur sparingly up to about 7000 feet. The favorite habitat is the oak and cedar belts in the canyons and on the mountain sides.

Spinus tristis pallidus. Pale Goldfinch. Four were seen on November 23 in Bryce Canyon, at the east boundary of the park, at an elevation of 6890 feet. A female was collected by Long. The Pale Goldfinch is quite common in this region, but the present record is as high as I have recorded it. Other recorded localities are Springdale, Kanab, Cedar City and Panguitch, the last locality being about 25 miles northwest of Bryce Canyon National Park.

The addition of these seven records brings the total list of birds recorded from Bryce Canyon National Park to eighty-three species and subspecies.—W. S. LONG, *Colorado Springs, Colorado, November 6, 1936*.

The Nuptial Flight of the Texas Nighthawk.—The behavior of the Texas Nighthawk (*Chordeiles acutipennis texensis*) in the breeding season is fairly completely known from the accounts given by Dawson (Birds of California, Booklovers' Ed., vol. 3, 1923, pp. 1065-1069), Grinnell and Storer (Animal Life in the Yosemite, 1924, pp. 347-348), and Woods (Condor, vol. 26, 1924, pp. 3-6). Especially favorable opportunities to observe this species in nuptial flight were afforded me in May and June of this year while camping in the lowlands of the Santa Cruz and Gila river valleys of southern Arizona. On the occasions when birds were watched performing, a few new items came to my attention that perhaps justify a brief re-description of the courting actions of this species.

The courtship flight is essentially a pursuit at close range, of the female by the male, with accompanying vocal notes and peculiar flight posture. On the evening of June 4, 1936, on Rillito Creek, near Tucson, I was stationed on a ridge overlooking a side wash. Nighthawks were flying at about my level, in a light that still was strong enough to make visible details of markings on the birds. Several pairs within a space no greater than an acre were engaged in the pursuit flight. The contrast in degree of whiteness of wing and throat patches of males and females was at once evident. That this sexual difference apparently was recognized by the birds and that it was specifically accentuated by the actions of the male were facts new to me. As a male swung into line behind a female, his white throat was displayed so that, as the pair flew toward me, the brownish white throat of the female was scarcely noticeable, whereas that of the male was a conspicuous white beard. The impression was gained that the feathers of the throat of the male were lifted and that the whole throat area was expanded. Usually, perhaps always, this "flashing" of the throat patch was accompanied by vocal notes. Like a Red-winged Blackbird, display of the male insignia was associated with characteristic sounds. When males came close to one another, frequently they challenged with trills and throat display; but they did not pursue one another to any extent.

Vocal notes are of four main types: (1) Long-continued guttural trills, well characterized by Dawson as amphibian-like, but also remindful of the sound of a motor at a distance; (2) a twang like the picking of a banjo (Dawson) or, more prosaically, like the twang of a jew's-harp; (3) staccato clucks; and (4) melodious trills of varying intensity, similar to those of western screech owls (Grinnell and Storer), except for cadence. The twang and the melodious trill may follow one another in rapid succession. The guttural trill seemed not to enter into the courtship on the wing. I could not be certain that this note was given on the wing at all; its source always seemed stationary. The melodious trill was occasionally given by birds perched in mesquite trees in the heat of midday.

In the nuptial pursuit, the male attempts to take a position close behind and a few feet above the female, all the while twanging, clucking and trilling. Then follows a short plunge toward the female, accompanied by a melodious trill of increasing intensity. The plunges which I observed were never more than about six feet, and not at a steep angle. During the plunge the wings were bent downward in precisely the same fashion as in the terminal phase of the boom-flight of *Chordeiles minor* (Miller, Condor, vol. 27, 1925, p. 142, fig. 39b). There was no additional note accompanying this action, hence nothing comparable to the boom of *minor* that is produced by the wings. There is