

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

not enough speed attained by *acutipennis* to vibrate the feathers, even if they were capable, by reason of their shape, of making a sound. Nevertheless, the similarity of flight posture is significant in such closely related species. In the courtship of each there appears the same action pattern, the same neuro-motor response, constituting the ecstatic climax of the nuptial flight. *Chordeiles minor* may be supposed to have evolved a wing-produced note out of this common heritage of behavior. Or, has *acutipennis* retained but the silent vestige of an action once productive of sound? The Texas Night-hawk has a larger repertoire of vocal notes than does the other species. The plumage display, dive, wing posture and vocal note, all coördinated, should be as effective advertisements of maleness as the boom-flight of *minor* that is more spectacular to human perception.—ALDEN H. MILLER, *Museum of Vertebrate Zoology, Berkeley, California, September 19, 1936.*

The Prairie Falcon Nesting in Saskatchewan.—On May 23, 1936, Mr. C. F. Holmes, in company with Mr. E. H. M. Knowles of Regina, discovered the Prairie Falcon (*Falco mexicanus*) nesting in the valley of the Frenchman River, fifteen miles southeast of Eastend, in southwestern Saskatchewan. As appears to be usual, there was no nest of any description, the four eggs being laid on the bare sand in a recess in the side of a thirty-foot cliff (see fig. 12). A series of photographs was taken of the eggs and later, of the young birds, the last picture being secured on July 8.

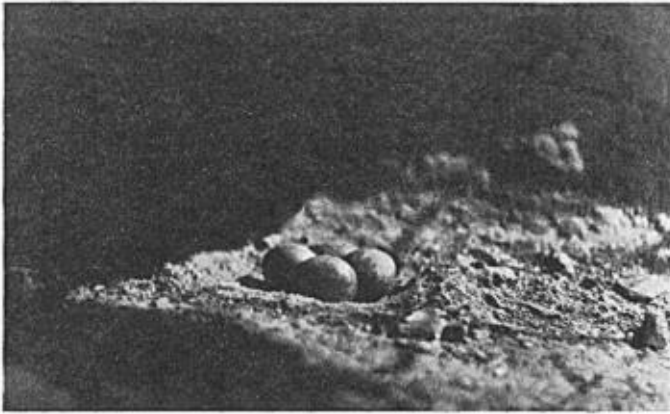


Fig. 12. Eggs of the Prairie Falcon near Eastend, Saskatchewan.

In settled-up country, the Prairie Falcon can often become a troublesome "chicken-hawk"; but in common with other raptors its numbers are not what they were twenty years ago. Thus the finding of the nesting place, the first recorded in the Province, is of special interest. We may hope the falcons will continue to use this aerie where they stand an excellent chance of rearing their brood unmolested.—LAURENCE B. POTTER, *Gower Ranch, Eastend, Saskatchewan, October 26, 1936.*

Canyon Wren in the State of Washington.—On August 12, 1936, I saw a Canyon Wren (*Catherpes mexicanus conspersus*) on some rock cliffs overlooking the Columbia River, in Ginkgo Petrified Forest State Park, Kittitas County, Washington. The bird remained within thirty feet for some minutes, and several times voiced its descending-scale song. The bird, or another individual, was observed and heard at the same place, under equally good conditions, on August 26.

As far as I know, this species, heretofore, has not been definitely reported from the state of Washington. Although state records, to be acceptable, usually require the collection of a specimen, the appearance and song of the Canyon Wren are so characteristic, and I have become so familiar with the bird in California, that I am confident of the accuracy of this identification. According to Grinnell and Behle (*Condor*, vol. 37, 1935, pp. 247-251), this is the only recognizable subspecies in the far western United States.—RICHARD M. BOND, *Wildlife Division, National Park Service, Portland, Oregon, October 2, 1936.*