

near a little stream flowing down a steep hillside. This Warbler has been taken at Neosho Falls, and in Doniphan County (three records) but not in Douglas County before this time.—W. S. LONG, *Museum of Birds and Mammals, Lawrence, Kansas.*

Some Breeding Birds of the Pine Forest Mountains, Nevada.—On the afternoon of June 4, 1935, my companion, Dr. Richard M. Eakin, and I worked our car south along the crest of the Pine Forest Mountains to within six miles of Duffer Peak. We chose a camp site at 7000 feet in an aspen grove that bordered a meadow. In the next three days we made acquaintance with several interesting avian households, occupants of our camp grounds. First to attract attention was a pair of Hairy Woodpeckers (*Dryobates villosus*) that had partially excavated two nest holes in the smooth trunk of a living aspen, fifty feet from our tent. Both holes had been worked this season, but the upper one could never have been completed for it was only six inches above the other.

During the first day, June 5, commotions were frequently noticed at the Woodpecker's tree. The trouble was instigated by a pair of Mountain Bluebirds (*Sialia currucoides*). Whenever the Woodpeckers alighted near the holes, both Bluebirds attacked by diving at them, uttering harsh notes and apparently snapping their bills. Such attacks often lasted five minutes. Evidently the Woodpeckers were too much disturbed by them, possibly also by us, and deserted. During the last two days at camp, no more fights were seen and the Bluebirds were carrying nest material to the tree. The Woodpeckers stayed in the grove, often close to camp, but did not go to the trees near the nest. Since the Bluebirds were just beginning to build, the Woodpeckers were clearly the first occupants and had been dispossessed. Irrespective of other factors which may have contributed to their departure, there was no doubt of the intention of the Bluebirds to displace them.

On June 6 the female Bluebird went to an unfinished Robin's nest just over the tent and settled in it, much to my surprise. She plucked material from the margin and flew to her own nest hole. The Robins added to their nest later that day. The Bluebird, symbol of happiness and gentleness, became to us a different character, whose actions, viewed anthropomorphically, were aggressive and piratical. Interspecific competition for nest material and nest site were enacted before us.

Yet the Woodpeckers were not inactive territorially, for while submissive to the Bluebirds, they appeared to be excited by the presence of other Woodpeckers. Drumming was frequent, and once at close range the female was seen to drum. This "song" of the Woodpeckers is essentially a masculine function, but perhaps, as in many passerine birds, female Woodpeckers occasionally "sing" or announce territory. I found that tapping on wood with some metal object brought the birds overhead where they called vigorously and drummed.

At dusk, Poor-wills (*Phalaenoptilus nuttallii*) called from the Artemisia brush. One individual with an especially high voice and rapid cadence came two evenings to the same lookout post, an aspen branch six feet above the ground. Its eye shine was always ruby colored, and only one eye was visible at a time. It hawked for insects from this perch, and as we whistled in imitation it circled overhead within four feet, giving a soft guttural "querk." Poor-will calling was rarely heard except during crepuscular hours.

At about 6:30 p. m. as the shadow first touched the aspen grove a muffled hoot, repeated at one second intervals, sounded from the trees up the hill slope. It was the note of a Long-eared Owl (*Asio wilsonianus*). In quality it resembled the note of the Band-tailed Pigeon. The pitch at first approximated that of the hoot of a female Horned Owl. As the hoots were repeated the pitch was raised as much as five half

tones. Even so, they were remarkably low for so small an Owl. Six to twenty hoots were given in a series and often only a few minutes elapsed between groups of hoots.

Actually the bird was calling much nearer camp than we first thought. We found the nest in an aspen only seventy feet away. The sitting bird did not hoot, but the male, or at least the bird not incubating, was heard frequently throughout the night, calling from trees between twenty and fifty feet from the nest. It stopped calling when we approached too closely, nor would it hoot with the flashlight shining on it.

The incubating bird sat closely, its eyes shining with a white light, both eyes visible at once. The nest held three incubated eggs. At about 7:30 p. m. on June 6 and 7 a hoot four or five half tones higher than the highest notes of the usual call was heard two or three times, once simultaneously with the lower note. An immediate trip to the nest disclosed the absence of the female. Evidently this was the note of the female and was given only when away from the nest. She returned each night after less than half an hour's absence. Thus another species of Owl proves to have a sexual difference in hoot, with the female higher pitched as usual (see Miller, Condor, XXXVI, 1934, pp. 212).

Our purpose in visiting the Pine Forest Mountains had been to secure breeding Juncos. Walter P. Taylor in his survey of this region (Univ. Calif. Publ. Zool., VII, 1912, pp. 319-436) reported a juvenal *Junco oreganus thurberi* taken July 30. This he hesitated to consider as evidence of breeding because he thought it possible that the bird might have strayed from the Warner Mountains, eighty-five miles to the west. From my recent reconnaissance of the intervening desert region I doubt that a Junco would move through such uninviting regions in July. We were successful in securing three adult Juncos on the point of breeding; no others were seen. One mated pair, the male singing, was taken as the two birds fed together among snow banks in the limber pine timber at 8,400 feet. The female had yellow pigmented ova 3 mm. in diameter. This female was a fairly typical *thurberi*; the male was a hybrid *J. c. caniceps* × *J. mearnsi* with cinnamon-colored sides but bright red back. The third bird, a female with gonads similarly enlarged, was a typical *J. o. shufeldti* of the type breeding in the Cascade Mountains of northern Oregon and Washington.

The limited area of Boreal life-zone evidently supports a small breeding population of Juncos of mixed character recruited from the adjacent species and races in Idaho, Nevada and California. The *shufeldti* may have been a retarded migrant but it was not a cripple and was sexually active. No migratory flocks were present and the last wave of migrants in this area was three weeks earlier. Possibly in certain unfavorable seasons no Juncos breed in these mountains so that there may not be a self-perpetuating stock over any great length of time.

Four species that we found in the Boreal and Transition areas were not listed by Taylor as summer residents. These were Ruby-crowned Kinglet (*Regulus c. cineraceus*, M. V. Z. no. 67129), Hermit Thrush (*Hylocichla g. polionota*, M. V. Z. no. 67123), Downy Woodpecker (*Dryobates p. leucurus*, M. V. Z. nos. 67108, 67109), and Crossbill (*Loxia curvirostra*). The Kinglets were not common but a few nesting pairs were found in the denser patches of limber pine. Hermit Thrushes were fairly common in the pine forest. The Crossbill was a solitary bird seen in the pines; there is no certainty that it was breeding. Hairy Woodpeckers (*D. v. orius*, M. V. Z. nos. 67100-67103), which were nesting commonly in the pines as well as in the aspens at camp, were not mentioned by Taylor.—ALDEN H. MILLER, *Museum of Vertebrate Zoology, Berkeley, California, July 16, 1935.*

In Reference to 'The Birds of Wrangell Island.'—In my paper on the birds of