

NESTING OF THE GRAY-HEADED JUNCO

By ROBERT B. ROCKWELL

WITH ONE PHOTO BY THE AUTHOR

REFERENCE to back files of THE CONDOR reveals the fact that nothing has been published in this magazine regarding the nesting habits of *Junco caniceps*; hence a few notes on the subject may be of more or less interest to CONDOR readers.

On June 16, 1910, a short trip was made from Grand Lake, Grand County, Colorado, where I was then camping, to Columbine Lake, a beautiful body of water about 100 acres in extent lying two and one-half miles northwest of Grand Lake, at an altitude of about 9,000 feet. Columbine Lake is a typical mountain lake of



Fig. 55. NEST AND EGGS OF THE GRAY-HEADED JUNCO

crystal clear water, surrounded by lofty mountains, with a dense growth of pine and spruce timber extending in places to the water's edge.

Along the west shore extends a narrow strip of boggy ground lying between the heavy timber and the water's edge and covered with a variegated growth of rank grass, moss, low scattered bushes and down timber. As I made my way around the lake two Spotted Sandpipers fluttered from their nests each containing four eggs, and a few feet farther on, in a precisely similar location a Gray-headed Junco flushed noisily from under my very feet. The location was altogether incompatible with my ideas of junco nesting sites, but a careful search was made nevertheless, and finally the nest containing four eggs was discovered, wonderfully concealed in a deep cavity in the ground completely roofed over by a projecting clod of moss-covered earth and entirely hidden and protected by the dense branches of a small bush. The parent bird flew directly to the dense pine timber close by, where it

voiced its anxiety with the peculiar metallic junco chirp, altho seldom allowing itself to be seen.

Within a hundred yards of the first nest another bird was flushed from a cunningly concealed nest, deeply sunken in the ground among the dense branches at the base of a small bush. It also contained four eggs, and the parent upon flushing immediately disappeared and was seen no more.

Proceeding around the lake, a third bird was flushed from a nest built in the center of a small shrub, but not nearly as well concealed as the other two. This nest contained two eggs and two freshly hatched young—tiny, wriggling, pinkish little creatures irregularly covered with very fine grayish down.

As it was raining and the temperature entirely too low for comfort I marked the nests and sought shelter. On my return, a couple of hours later, the parent of the first nest found stayed on the eggs until we almost touched her, and so perfect was the concealment of the nest and the protective coloration of the bird, that altho we knew exactly where to look, both were absolutely invisible to the eye at arm's length. In all it was the most perfectly concealed nest I have ever seen.

The birds on the other two nests, however, flushed much more wildly than on our first visit and were not so demonstrative.

After photographing the nests, the two containing eggs were collected. They are practically identical in size and construction, being strongly and compactly built of dried grass, well rimmed, deeply cupped and lined with finer dried grass and a scant amount of fine hair. They are somewhat longer than wide and measure as follows: Outside, length $4\frac{3}{4}$ inches, width $3\frac{3}{4}$ inches, depth 2 inches; inside, long diameter $2\frac{1}{2}$ inches, short diameter $2\frac{1}{8}$ inches, depth $1\frac{1}{2}$ inches.

The two sets of eggs exhibit a fine variation in coloration and marking. One set has a ground color of light clay color with a slightly bluish tinge, lightly marked with minute and very subdued spots of reddish brown. Two of the eggs are evenly spotted over the entire surface, while on the remaining two the spots are partially confined to the larger ends.

The other set has a much lighter color—almost pure white—clearly and boldly spotted and blotched with clear reddish brown, the markings being heavier and more clearly defined around the larger ends. The heaviest marked egg of this set is almost identical in coloration and marking with a set of Field Sparrows' eggs in my collection.

The two sets are remarkably uniform in size, and average $.75 \times .57$ inches.

NOTES ON REGURGITATION

By HARRIET WILLIAMS MYERS

HAVING been led to believe, thru reading, that for the first few days, practically all birds feed their young by regurgitation, I have been surprised at the number of birds I have observed who do not use this method of feeding, but rather from the very beginning feed insects directly to their young.

In March, 1909, a pair of Song Sparrows (*Melospiza m. cooperi*) nested in the pampas grass in my yard, giving me an opportunity of daily observation. On the seventh of March the eggs hatched and I stationed myself to take feeding record. At 8:50 the female left the nest and began searching about in the grass and weeds. In one minute she returned to the nest carrying a visible object in her bill which