

this way he states they change during each day, just about every two hours. There is no waiting around the nest,—the parents arriving and leaving quickly and directly.

This set he collected April 8, taking the male by hand from the nest and five beautiful eggs rewarded him, incubation about one-fourth. The nest was on east side of tree, opposite the cold northern blasts, about twelve feet from ground and saddled on *two* stout limbs several feet from the bottom of the tree. Five feet of snow was under the tree. The nest was in no ways different from previous ones observed being very warm and adapted to the severe climate of that altitude. The eggs measure 1.33x.92, 1.26x.89, 1.36x.91, 1.34x.91 and

1.33x.94. This large set must be considered extremely unusual, the largest set previously found containing four and the usual nest complement being three.

The second set alluded to was taken April 17 at about 7000 feet altitude in a black balsam tree fifty feet high. The nest was about sixteen from the ground the tree being a very wide-spreading one four feet through at the trunk. The nest was fully ten feet from the body of the tree saddled on a great limb ten inches in diameter. The female was collected by hand from the three eggs, and with the nest carefully wound in string was safely brought down,—but alas for our hopes, incubation was nearly complete.

#### Notes on the Verdin.

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THE California range of this bird, *Auriparus flaviceps*, being somewhat restricted, a few observations made on the Colorado desert may prove interesting. In October 1889 I first made acquaintance with the bird. While hunting at Whitewater ranch, at the east end of San Gorgonio Pass, I found a queer nest in a mesquite and as it was a new nest in the fall of the year I thought it might be the roosting place of some new bird. Returning after dark I captured the owner. The following spring I found a nest of young birds and one infertile egg and a year later secured a set of five eggs, all in the same neighborhood. This ranch, lying at the west end of an arm of the desert and at the same time merging into a fertile mountain pass, seems to be the western limit of the range of the verdin.

The bird is shy and retiring in disposition and at first glance might be mistaken for the California bush-tit. But a closer scrutiny will reveal the yellow or greenish-golden tint of the head and the deep chestnut color of the lesser wing coverts. It frequents all mesquite

and screw-bean thickets on this desert. Its range is easily determined by the great number of nests seen. A peculiar feature is the building, by both sexes, of winter nests in which to roost at night. These nests are built in the fall and early winter and a male and female nest are usually found near together, probably mated birds. They seem to have no idea of the conservation of heat or of energy by having a "nest built for two," but go about making two roosting places.

The nests of male and female differ a little, the former being less elaborate, smaller, with not so much lining in it. The female *winter* nest differs but little from the *breeding* nest and I am inclined to believe in some cases is used as such, possibly by experienced or lazy birds. The only material difference between female winter and the breeding nests lies in the shape of the interior and possibly some difference in thickness of lining. The nest is retort-shaped with entrance through a short neck extending from one side downward at angle of 45°. In the breeding nest there is a deep cup or depression

with a ridge or rim next to the entrance tube or neck, to prevent the eggs rolling out. In the winter nest there is merely a slight depression, little more than a shelf on which to rest. The one instance which leads me to think the young are sometimes raised in the winter nest is as follows:

In the early part of March, 1899, — the 7th I believe—I found a male winter nest and about twenty feet from it what I supposed to be a female winter nest, both in the woolly yerba santa or *Eriodictyon tomentosum*. A few weeks later, about April 15, I examined the nests and found four fresh eggs in the female's nest. That evening after dark I returned to the nests and captured both male and female in their nests. I took them to my camp and in the morning the female had added another egg thus completing the set for me, for which I rewarded her with liberty.

Looking over my notes I find most of the verdin entries date from March 20 to May 2, most of the fresh eggs being found the last week in March, though I have found fresh eggs on March 10. The number in a set is four or five about evenly divided a to frequency. This season I have found three complete sets of four each and two of five. Most frequently the nests are found in mesquite trees and the smoke tree or *Dalea spinosa*, Daley's thorn tree. But any spiny shrub will answer, as I have found nests in the screw-bean, cholla cactus, desert willow, tree-sage, catclaw, *Eriodictyon*, and last month I found one in a grapevine growing up in a cottonwood tree. The nests will average about five feet from the ground though I have found them as low as 2½ feet and as high as ten or twelve feet.

The bird is easily flushed from the

nest and can be heard chipping in the nearby brush but takes care not to approach the intruder. But there are exceptions; as this season a pair of them came only four feet from me and scolded while I examined their nest of fresh eggs. Infertile eggs are often found especially toward the end of the breeding season, and in most of the sets of five eggs one is infertile. I do not think I ever found five young in the nest though often four and one rotten egg. The eggs resemble those of the gnat-catcher, pale green with brownish spots on them, but are a little smaller and the markings paler and often coarser, approaching blotches.

Last December I found two female winter nests and later saw several of both sexes. One of them in a mesquite tree was ten or twelve feet from the ground and measured more than eight inches long by seven wide and seven deep. Lining was about one and one-quarter inches thick and composed of feathers—quail, chicken and others. The cavity was spherical, about one and one-half inches in diameter. The exterior was of mesquite and other thorny twigs, grass and weed stems, fine leaves, and any woolly or sticky fibre or weed that would hang together and help bind the nest.

The birds seem almost independent of water as I have found nests and young about five miles from water and have seen old nests at least ten miles from any known water. The problem I am now at work on is that of the use of winter nests for breeding and if a number of nests can be located and marked next fall and winter and examined in the spring the question can be settled. Perhaps some of THE CONDOR readers can answer from personal experience or some other knowledge.

### The Southern White-headed Woodpecker.

BY JOSEPH GRINNELL.

#### *Xenopicus gravirostris*, new species.

SPEC. CHAR.—Similar to *Xenopicus albolarvatus* but bill much heavier, and size in general