nevertheless. Besides these there were the Mourning Dove, Say Phoebe, Ashthroated Flycatcher, Richardson Pewee, Woodhouse Jay, the Desert Sparrow, Gray Vireo, Gnatcatcher, and House Finch, one of whose nests was found in a tree cactus. Later, in climbing the thousand foot bluff we found a family of Mexican Falcons near the top.

With the additions these birds made to our Pajarito list and a few others noted between camps there were about forty species. Considering the fact that they were confined to a narrow strip between broad plains on which the list of birds often consisted of two, sometimes of one species, the forty seemed a goodly number. And now, thinking back over towering cliffs enlivened by moving forms and housing ancestral homesteads and of gulches and amphitheaters below ringing with joyous bird songs, this brave little band of forty peopling the juniper belt between silent plains seems to make the real oasis of the Llano.

## THE BLUE-THROATED HUMMINGBIRD

By FRANK C. WILLARD

WITH FOUR PHOTOS

A S I wander about among the canyons of the Huachuca Mountains, there are two places where I always listen for a "squeak-squeak" repeated every few minutes, the second note higher pitched than the first, and the third note lower than either of the other two. These two places are in deep narrow canyons. It was some time before I was able to locate the author of the squeaks. Finally, I located a large hummingbird, perched on a dead twig well up in a fir tree.



Fig. 19. GREENHOUSE IN WHICH NEST OF BLUE-THROATED HUMMINGBIRD WAS BUILT; LOWER TIP OF NEST MAY BE SEEN WITHIN, BETWEEN CENTRAL PAIR OF SLATS, AT TOP

I knew it was not the Rivoli Hummingbird (Eugenes fulgens), as its notes were well known to me and are very different. I suspected that it was the Bluethroated Hummingbird (Coeligena clemenciae) and one day made sure of it by having one perch close to me as I sat, motionless, on a stone. The dull blue throat (for it looks dull in a shadow) and general dark color identified it readily. A slight movement of mine frightened it. It flew away into the fir tree to its favorite twig, and began to "squeak". This was in 1897.

In July, 1899, I located a nest built in an old Black Phoebe's nest on a rock overhanging a shallow pool. Near here, in May, Geo. F. Breninger had taken a set from a nest built among some ferns growing on a vertical rock. My set consisted of one egg, incubation well along. I attempted to get a photograph of the bird on her nest, but on account of the dense shadow the exposure was not a success.

Although I made repeated efforts I failed to locate another nest until the season of 1910. I made my headquarters at Berner's ranch in Ramsay Canyon. He has a flower and fruit garden, with several small greenhouses for winter use. Hanging from a nail in the roof of one of these was the handle of a lard bucket, and built upon the lower crook was a manystoried hummer's nest, some four inches high. It contained one newly hatched The tell-tale "squeaks" of an unseen bird identified my find and by keeping out of sight, and quiet. I was able to get a good look at the female parent. Later I saw very frequently both parents feeding among the flowers and occasionally within arm's length of me. On May 22 I took a photograph of the young one in its nest and judge it was at least a week old at that time. On May 29, I again photographed it and the difference in the length of its bill and the feathers of its wings and tail was very noticeable. On this occasion the young-

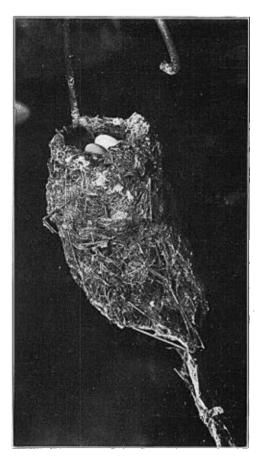


Fig. 20. EGGS AND NEST OF BLUE-THROATED HUMMINGBIRD, BUILT ON BUCKET-BAIL SUSPENDED FROM CEILING INSIDE OF GREENHOUSE

ster fluttered from the nest several times as I was attempting to arrange the camera for the exposure. The next day I left for town and did not get back again until June 16. I at once investigated this nest and found it empty.

During the last few days of my previous visit, I had seen the female in a bunk-house that had formerly been used as a greenhouse. A piece of baling wire was wound around a nail in a rafter and formed a sort of hook. When I found the young one gone, I went at once to this bunkhouse and found the female sitting on

a completed nest. She flew as I entered the room. I secured a ladder and soon held the nest and two fresh eggs in my hand. Some children were occupying this room so I did not dare leave the nest for further notes. I put another wire up, however, to furnish another nesting site.

June 21, the nest where the young one had been seemed to be receiving additions, and the sides were somewhat built up, but I could not see the birds around. June 25 the nest contained one egg and the next morning there were two. A visitor told me that it was liable to be taken by some small boys who were there, so again I was afraid to leave it for observation and collected the nest and set, first taking a picture of it, showing the eggs. The parent birds seem to be very shy for hummingbirds, particularly around the nest. Unless I was entirely hidden, neither

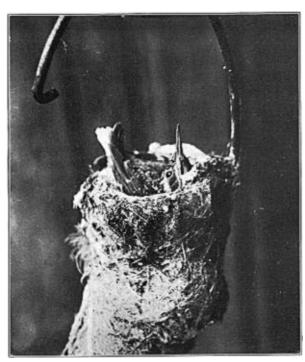


Fig. 21. YOUNG OF BLUE-THROATED HUMMINGBIRD, MAY 29, 1910

one would come near, though I could hear the tell-tale squeak first from one point and then from another of the nearby trees and bushes.

There is a small stream which flows through the ranch, and it is crossed by a small foot bridge overlying by a willow and a sycamore. This was a favorite hunting ground of the Bluethroats. About the last bird note heard at night and the first in the morning was the squeak of this hummer coming from this point in the garden.

The long diameter of the eggs is about the same as in those of the Rivoli but the short diameter is a little greater. This may be an individual characteristic of the pair whose nests I took. However, the birds themselves are stouter bodied than the Rivoli and it is natural to expect their eggs to be larger. The nest is made largely of oak blossom hulls, and stems of the same,

with a small amount of plant down intermixed. The whole is well tied together with cobwebs. The nest cavity is shallow and the edges are not incurved, differing in both these respects from the nests of the other hummingbirds with which I am familiar.

The place where I hear the other pair is near no house and I am anxious to locate the nest and learn what the natural nesting site is, man not furnishing a convenient substitute. Many hours of patient watching have failed to reveal it yet, but I live in hopes.



Fig. 22. YOUNG OF BLUE-THROATED HUMMING-BIRD ABOUT TO LEAVE NEST

## ODDS AND ENDS

By JOSEPH MAILLIARD

Aix sponsa. Wood Duck. Coming across a small band of Wood Ducks in the fall of 1910, near the junction of the Tuolumne and San Joaquin rivers, reminded me of the fact that it had been many a long day since I had seen one of these birds alive, and that while they used to be plentiful in Marin and Sonoma counties back in the seventies and eighties they are extremely scarce in those regions nowadays. As late as twenty-five years ago it was no uncommon thing to see Wood Ducks scattered in small groups along such a stream as the "Paper Mill" or "Lagunitas" creek in Marin county, or anywhere along the Santa Rosa Laguna in Sonoma county, even where quite a number of people lived in the vicinity and there was a good deal of travel along the streams. Often they were found in small tributaries and diminutive ponds along these waterways. But now, with the country rapidly filling up, and more shooting going on, none are to be met with in these their old and favorite haunts. So it was a great surprise, as well as a pleasure, to come across them again in Stanislaus county this year, the greater surprise for the reason that none were seen in the two previous years during which I have had opportunity to make observations there. This last fall (1910) several were seen on different occasions, one was taken, and one flock of fourteen, mostly males, was flushed from a small laguna among the willow thickets.