

possible width just as they disappeared. As a rule the downward plunge was made without much apparent effort, the bird simply immersing its head and then vanishing with surprising if not mysterious quickness. Occasionally, however, it would spring upwards and forward in the manner of a Grebe or Merganser, sometimes showing not only the entire outline of the lower parts of the body above the surface but also the whole of the legs and feet, just before re-entering the water. This may be done to give greater impetus to the descent; but I observed that the same bird would sometimes alternate one method with the other during a succession of dives made over exactly the same spot.

### THE PALLID WREN-TIT (*CHAMAEA FASCIATA HENSHAWI*)

By J. H. BOWLES

TO any bird student who has not previously made their acquaintance, the Wren-Tit must at once stand in the foremost rank of all the California birds. *C. f. henshawi* is the form of this species that is found in the vicinity of Santa Barbara, the locality in which all of the following notes have been made.

The Wren-Tits are most certainly well named, for their general appearance and shape at once remind one of a greatly magnified Bush-Tit. Add to this their wren-like fondness for haunting the ground and low brush, peering out at you with tail aloft, and the name forms an ideal combination. Occasionally, however, they may be seen gleaning insects among the topmost branches of a live-oak, the tit in them seeming to have asserted the mastery over the wren for the time being.

Eternal cheerfulness is theirs, beyond a doubt, for they sing every day in the year, be it rain or shine. Their two songs differ completely, and here again they seem to demonstrate their right to a hyphenated family name. The most common song is a rather loud and very pleasing wren-like trill, which, incidentally, nine people out of ten in southern California will tell you is that of the Canyon Wren. The other song is a succession of about six or eight, loud and somewhat chicken-tike *peeps*, rapidly executed and hardly worthy of being called a song. It is quite different from anything else that I have ever heard, except that it forms a very fair elaboration of what some of the Tits consider their song notes.

In the matter of food they appear to be very nearly omnivorous. Their main staples are bugs, beetles, larvae and insects of all descriptions, but they are also fond of the smaller berries, such as those of the Poison Oak (*Rhus diversiloba*). For a time I made some attempts at trapping the smaller mammals, using dry bread or cheese as baits, but it was necessary to give this up, as upon every visit to the traps I found that one or more Wren-Tits had succumbed to the temptation of these new items on the bill of fare.

Around Santa Barbara they are resident throughout the year, and to the best of my belief remain mated for life. This theory is based upon the fact that they are almost invariably found travelling in couples; for, should you, at any season come upon one bird, another is sure to be only a few feet distant. Nest building commences during the last two weeks of March, my earliest full set of fresh eggs being found on April 4. From that time, eggs may be found until at least the second week in May, but I have seen no evidence to conclude that more than one brood is reared in the season. A rocky hillside, thickly covered with live-oak bushes is the favorite nesting site in this locality, though they may sometimes be

found nesting in the sage (*Artemisia*) of the lowland country. The nest, in both location and construction, is not in the least what the uninitiated oölogist would expect in this type of bird. The first one I ever saw was building and, no birds being present, I felt sure it must belong to some kind of flycatcher that had escaped my notice, so closely did it resemble certain types of nests of the Traill Flycatcher (*Empidonax trailli trailli*) that I have found. It was a perfectly typical nest, both in location and construction, being placed about one foot from the ground in the crotch of a live-oak bush that stood in a dense thicket of the same. It is built externally of silky plant fibres, fine strips of bark and fine dead grass, the lining being mostly of horse hair. The measurements are externally four inches in diameter, by a little less than three inches in depth; internal dimensions being two and one-quarter inches wide, by one and three-quarters deep. I have seen one nest as high as five feet above the ground, but this is most unusual, three feet up being considerably higher than the average.

The eggs in all the nests that I have examined were invariably four in number to the set. They are most attractive in appearance, being greenish blue in color, without markings of any kind. In shape they are a rounded-oval, as a rule, averaging in size about .74×.57 inches.

The female appears to commence covering the eggs much of the time before the set is completed, as on two occasions I have found the bird sitting on three eggs, to which a fourth was added on the day following. Even under these circumstances the bird is exceedingly loath to leave the nest, and after incubation commences it is necessary to startle her very considerably, or remove her by hand, in order to examine the contents of the nest. She will then very often remain in the same bush, scolding in a low, harsh *ch-ch-ch*, continuously and very rapidly repeated. This usually brings up the male, who looks over the situation for a moment or two and then returns to his singing, feeling apparently not the least sympathy with the vigorous protests of his mate. I have noticed this habit in several other varieties of birds, and have often asked myself if it might not, instead of lack of sympathy, be another method of endeavoring to draw the attention of an intruder away from the nest.

## COLLECTING SOCORRO AND BLACK PETRELS IN LOWER CALIFORNIA

By PINGREE I. OSBURN

WITH TWO PHOTOS

**T**HIS Genus of birds (*Oceanodroma*) is to the author one of unusual interest. Every available opportunity that has come my way for five years past has been made use of to become better acquainted with sea fowl in general and the Petrels in particular. For this reason the Los Coronados Islands were visited several times in recent years, each stay consisting of from one day to two weeks. While I was disappointed by not finding these particular birds on all my trips, the entire number of days ashore in active work among their burrows would number a satisfactory total.

The two trips of most importance were on July 3, 1909 (the third trip), and June 19 of the present year (the sixth trip). The first was in company with Mr. Willis Ritchie, and the second with Mr. A. B. Howell. I wish to hereby acknowl-