

deposited in two layers and are of a pure white color, and as compared with the eggs of other ducks, possess a rather rough shell, sometimes even approaching a chalky appearance and being frequently slightly pyriform in shape. The measurements vary from 1.35x1.98 to 1.65x2.20 inches, the majority of eggs being a mean average of these extremes. The eggs partake of the characteristics of both those of the goose and duck, but this is not remarkable when it is remembered that the Tree Ducks constitute a family supposed by some to have originated ages ago from the hybridization of the goose and duck. They are equally at home in an alfalfa patch (about dusk) or in a lake of water, and are entirely at home in an oak forest not far from the breeding swamp, where they are said to assemble for the purpose of feeding on acorns.

I regretted my inability to visit the breeding site of these birds a month or two later in order to study their life history, but feel assured that immediately upon the young birds being able to fly, the parents assemble their clans

and depart at once for their southern home, as I have never seen *D. fulva* in California later than September, after which they are entirely absent from our shores until the following spring when they return in limited numbers. That well known ornithologist, Mr. W. Otto Emerson, of Haywards, has kindly favored me with his notes on this species which would indicate that the birds also nest in trees in this state, from all of which we may consider *D. fulva* a strange bird in more ways than one—equally at home on land or water and wholly unbiased in its nesting sites and feeding grounds. Mr. Emerson's notes are as follows: "On May 23, 1882, while collecting with Wm. C. Flint at Lillie's ranch near Tulare Lake I noticed a Fulvous Tree Duck sitting in the entrance hole of a large white oak near one of the ditches, but it was out of the question to reach it. Again on May 26 another was located sitting on the edge of a hole high up in a white oak. Lillie's ranch is nine miles from Wildflower, Tulare Co. and four or five miles southeast of the lake."

A New Race of the Brown Towhee.

BY RICHARD C. MCGREGOR.

Pipilo fuscus carolæ,¹ subsp. nov. NORTHERN BROWN TOWHEE.

Closely related to *P. f. crissalis* but distinguished by grayer and more uniform color of upper parts, much paler throat patch and slightly longer tail.

Type, ad. male (No. 2200, Coll. R. C. McG; Battle Creek, California, Nov. 7, 1898). Wing, 4.01; tail, 4.49; tarsus, 1.08; exposed culmen, .62.

The characters assigned to this form are seen at a glance, while a comparison of a series from Battle Creek with birds from the central part of California, show the under parts to be slightly paler and clearer in the northern bird. The only specimen in my collection which approaches *carolæ* is a skin from San Geronimo. Four young birds from Redding, taken in August, and one from Battle Creek in October, are very much like young examples from Santa Cruz.

AVERAGE MEASUREMENTS TAKEN FROM SIX EXAMPLES OF EACH FORM.

| | Wing. | Tail. | Tarsus. | Exposed Culmen. |
|------------------------|-------|-------|---------|-----------------|
| <i>P. f. crissalis</i> | 3.76 | 4.32 | 1.08 | .56 |
| <i>P. f. carolæ</i> | 3.76 | 4.41 | 1.03 | .59 |

Fifty-five skins have been examined from the following localities: San Geronimo, 3, St. Helena, 4, Palo Alto, 20, San Jose, 1, Livermore, 1, Gilroy, 1, Banta, 1, Ione, 1, Morgan Hill, 1, Santa Cruz, 2, Placerville, 1, Drytown, 3, Ukiah, 2, Cahto, 3, Redding, 4, Battle Creek, 7.

Battle Creek, the type locality, forms the boundary line between Tehama and Shasta Counties. My towhees were collected on either side of the creek, less than two miles from the Sacramento River. Ball's Ferry is the nearest post-office.

1. Named for Charlotte C. McGregor.