

Hands had the bird mounted in Douglas, Arizona, and in January, 1928, sent the specimen to Mr. Law for identification. The latter's notes detail a careful comparison with a bird in the D. R. Dickey collection (no. 15153), on which was based the identification of the specimen as an immature *Phaethon aethereus*. The bird was without any terminal plumes on the two central rectrices, concerning which point Mr. Law's notes read. "Terminal rectrices are broad, longer is 118.3 mm., both have black $\frac{1}{2}$ inch tip already partly gone as indicated by incised V at the end. As the tip of the rachis is approximately .6 mm. wide and squared, there may have been a long terminal plume at the first maturity of the feather." Since the bird seems clearly to have been immature, and since the young are described as "central tail-feathers not elongated" (Alexander, *Birds of the Ocean*, p. 323), or "no long, central tail-feathers" (Bent, *Life Histories of North American Petrels and Pelicans and their Allies* [U. S. National Museum Bulletin 121], p. 189), it is difficult to understand just why the plume may have been considered a possibility, although it is true that the tips are partly gone.

The only other occurrence of this species in Arizona known to me was, like the present record, based on a collected specimen "taken by Breninger at Phoenix, April 10, 1905, . . . now in the collection of the American Museum of Natural History (cf. Miller, 1910, p. 450)" (Swarth, *Pacific Coast Avifauna* No. 10, 1914, p. 10).—CHARLES T. VORHIES, *University of Arizona, December 1, 1933.*

The Plain Titmouse of Northern Santa Barbara County, California.—In the writer's recent paper on the birds of southwestern California (*Pac. Coast Avif.*, No. 21, 1933), the subspecific identity of the Plain Titmouse of northern Santa Barbara County was not stated, owing to lack of specimens from that region. Through the kindness of Ira N. Gabrielson, two specimens, a male and female, taken by him at Buellton, Santa Barbara County, February 17, 1933, have recently been examined and prove to be referable to *Baeolophus inornatus inornatus*. It seems probable, therefore, that, in the coastal district, the dividing line between *B. i. inornatus* and *B. i. transpositus*, of the San Diegan region, is along the Santa Ynez Range.—GEORGE WILLETT, *Los Angeles Museum, Los Angeles, December 10, 1933.*

A Full Set of "Runt" Mallard Eggs.—A set of "runt" eggs, shown in the accompanying photograph (fig. 16) was produced during the 1933 nesting period by the mallard that carries Biological Survey band 555414. This bird was banded on November 29, 1927, at the Rainbow End Game Refuge, Antioch, Nebraska, by F. J. Keller. She has returned to this station every year since, as follows: March 12, 1928, March 10, 1929, March 11, 1930, April 9, 1931, February 21, 1932, and March 12, 1933. [While this paper has been in press, Mr. Keller has reported that on February 4, 1934, Mallard No. 555414 again returned to his game refuge. This makes the seventh consecutive return for this duck.—F.C.L.]

A few days after the bird's first return in 1928, Mr. Keller noticed her on the roof of a barn and decided that she was searching for the site of her nest of the previous year, a haystack which had been standing at the end of the barn. In the meantime the hay had been fed, so Mr. Keller decided to offer her an artificial site. A box containing hay was accordingly placed on the barn roof. The duck immediately accepted it and has used the box for each succeeding nest. In 1928, 1929, and 1930, two sets of eggs were laid. Her total known egg production is as follows, the figures in parentheses being, in each case, the number that hatched: 1928, 16 (10); 1929, 18 (9); 1930, 22 (18); 1931, 12 (12); 1932, 14 (14); 1933, 14 (0). Total, 96 eggs, resulting in 63 ducklings.

Each year her young have been banded, and these have been recovered in several States and Canadian Provinces. Her own record for homing and for escaping the many and varied dangers that beset anatine life, is most remarkable, and interest in this Mallard is now enhanced by the production of the set of runt eggs here figured. This year (1933) she started to lay on April 12, and on the 18th Mr. Keller wrote the Survey that her nest held six runt eggs, adding the facetious comment that he guessed "the depression must have hit her."

Believing that our famous duck was entitled to a "better break" and feeling also that this set should be preserved, the author suggested to Mr. Keller that the eggs be carefully packed and shipped to the Biological Survey and that a set of normal

eggs be substituted. This was done, and 12 runt eggs were safely received by the Bureau accompanied by a statement from Mr. Keller to the effect that the complete set numbered 14, but two were broken in the nest. The duck accepted five normal eggs substituted by Mr. Keller, and on June 3 hatched five Pintail ducklings.

Comparison of the runt eggs with normal specimens shows the ground color to check very closely although the runt eggs are more heavily stained. The shell texture and thickness are normal except that the smallest eggs are more granular, par-

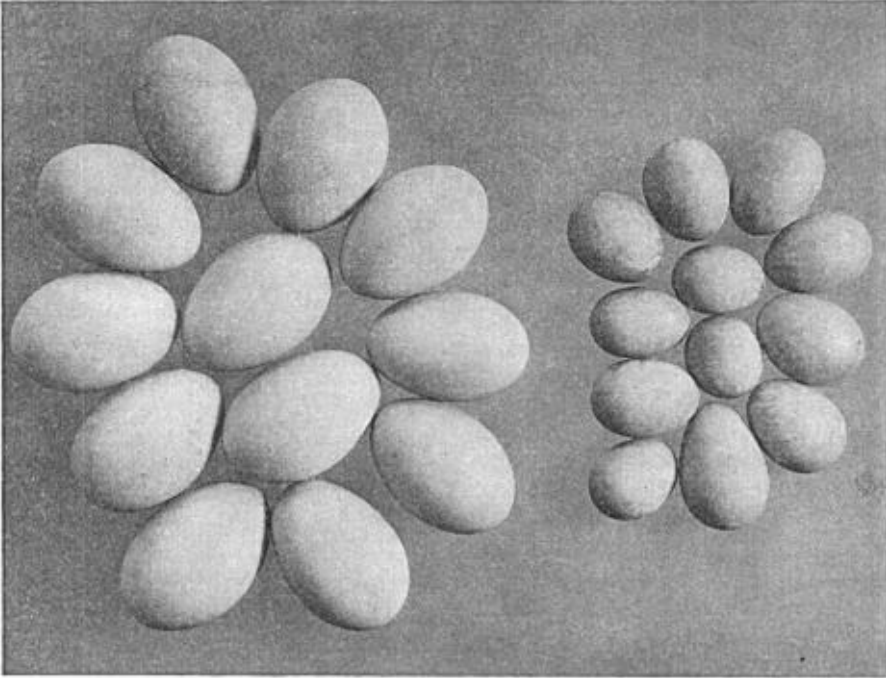


Fig. 16. Set of Runt Mallard Eggs photographed alongside a Normal Set of Equal Number. (All greatly reduced.)

ticularly at the larger ends. Measurements in millimeters are as follows: 45.0 x 30.1, 39.6 x 28.8, 38.7 x 29.7, 36.9 x 28.4, 36.9 x 29.1, 37.6 x 28.1, 36.8 x 27.8, 36.1 x 29.0, 34.8 x 25.1, 32.9 x 26.4, 32.8 x 24.9, 30.2 x 26.5. According to Bent (Life Histories of North American Wild Fowl, Bull. 126, U. S. Nat. Mus., 1923, p. 39) the measurements of 93 normal eggs average 57.8 x 41.6.

It is, of course, impossible to be sure why this set was abnormal. Mr. Keller reported that the duck apparently was in perfect condition. As she was fully adult when banded in 1927, her age is unknown, but it is quite possible that these runt eggs mark the final effort of the ovaries. The set has been deposited in the collections of the United States National Museum.—FREDERICK C. LINCOLN, *Biological Survey, Washington, D. C., October 3, 1933.*

Bush-tit Fighting its Reflection.—In the spring of 1933 my attention was drawn to the actions of a Bush-tit (*Psaltriparus minimus*) that for a long period battled with its reflected image in a second-story window of the bird department of the California Academy of Sciences. Day after day there was to be heard a persistent tapping on one particular window pane. Investigation disclosed an occupied nest in a tree about fifty feet away, suspended at about the same level as the window. The bird always returned to the same pane of glass, one of a series of windows extending the length of the building. Sometimes it fluttered up and down against