

Myadestes townsendii. Townsend Solitaire. "Not uncommon in fall migration at Barr." (Hersey)

Hylocichla guttata auduboni. Audubon Hermit Thrush. Migrant; at times abundant during the spring movement.

Planesticus migratorius propinquus. Western Robin. Summer resident; abundant.

Sialia currucoides. Mountain Bluebird. Summer resident; not common. More common during migration.

Denver, Colorado.

NESTING OF *DIOMEDEA NIGRIPES* AND *D. IMMUTABILIS* ON MIDWAY ISLANDS

By DR. T. W. RICHARDS, U. S. Navy

AMONG the smallest and most isolated of this country's outlying territorial possessions is the coral group appropriately known as "Midway". Situated in Lat. 28° 13' N., Long. 177° 21' W., the largest—Sand Island—only measures about one mile in length by half that distance in diameter; almost the entire surface is of barren sand, the highest point being some 75 feet above sea level. Were it not for a light-house and relay station for the long trans-Pacific cable, the entire group would be well-nigh forgotten.

As might be expected we have thus afforded an ideal breeding resort for numbers of pelagic birds, and for several years I tried to obtain some definite information regarding the local avifauna, but without avail until, in 1906 and 1907, two of my naval medical confreres were temporarily stationed at this outpost and, with the greatest pains, most kindly collected, prepared and forwarded to me a number of eggs, with notes, photographs and descriptions of the birds. To Drs. R. A. Campbell and M. C. Baker, U. S. Navy, I am much indebted, and take this opportunity of expressing my thanks and appreciation.

While I was aware that the Laysan Albatross bred on Midway in company with another species, I was surprised and particularly pleased when the photos and descriptions accompanying certain eggs showed beyond a doubt that they were referable to *D. nigripes*, the eggs of which, so far as I am aware, have not hitherto been fully described. I may add that the identification was kindly confirmed by Dr. Charles W. Richmond, of the Smithsonian Institution.

In nearly all published descriptions of eggs of the Diomedidae they are referred to in terms somewhat as follows: "white, sometimes speckled or sprinkled on larger end with reddish brown" (Ridgway), giving the impression that they resemble, on a large scale, eggs of the Stormy Petrel, for example. While this may be true of some species, it would be inappropriate for a great many specimens of *D. nigripes*, tho some are faintly speckled or even immaculate. In many instances, however, these eggs are boldly and handsomely splashed with dark brownish red, in some forming a cap or wreath about one end, usually the larger; in others, extending over nearly one-half the shell; in fact there is as much color, relatively, as on an average egg of any of our larger Buteos, tho it is apt to be more constantly confined to one end. Compared with eggs of *immutabilis* they

average more color, but extremes easily overlap and identity can not be determined from the eggs alone. Ten specimens of each measure in inches as follows:—

D. nigripes: 4.75×2.75, 4.31×2.62, 4.06×2.62, 4.25×2.50, 4.06×2.69, 4.19×2.75, 4.75×2.75, 4.12×2.69, 4.31×2.75, 3.87×2.69. Average: 4.27×2.68.

D. immutabilis: 4.00×2.75, 4.37×2.75, 4.31×2.69, 4.25×2.75, 4.31×2.75, 4.43×2.81, 4.50×2.75, 4.25×2.94, 4.25×2.69, 4.31×2.95. Average: 4.29×2.78.

The sizes are thus about the same.

Regarding the nesting habits, Dr. Campbell noted an interesting point of difference in the two species; both lay in slight hollows scratcht in the bare sand, but *immutabilis* usually heaps up this material in a ridge around the "nest". He says "the bird, sitting on the nest and reaching out as far as possible, picks up sand in its bill and deposits same around the edge until it is built up four or five inches. I noticed the difference in contour of nests of the two species, and as a white pair (Laysan) made a nest just beyond my door I was enabled to discover how it was done. The building up of the sides results in making the nest higher and also provides a shallow ditch all around it, which certainly makes it drier when there is rain."

Each pair of birds—and this applies to both species—rarely lays more than one egg in a season, if undisturbed; and if a second egg should be deposited the first is thrown out, leaving but one to incubate. If, as was formerly the case, the nests are systematically robbed, four eggs are usually supplied by each.

In 1906, *nigripes* arrived the first week in November, *immutabilis* following a few days later, and by the 20th of the month both species had deposited eggs. Dr. Campbell believes that the birds pair after arrival, but it would seem that some, at least, may have mated previously.

Incubation lasts about six weeks, both birds taking turns on the nest so that the egg is constantly covered. The young are fed, in the well-known manner, by regurgitation from the throat of the parent, remaining about the Islands until the following June or July, so that the entire reproductive period occupies about one-half the year.

It appears, according to my correspondents, that there are about a dozen species of birds that commonly breed on these islands, but excepting the albatrosses all or nearly all breed during our summer months, chiefly in June and July.

Since May, 1908, the small detachment of marines, formerly maintained at Midway, has been withdrawn, so opportunities for further ornithological observations are limited. The islands, however, now constitute a government bird reserve, under the protection, I believe, of the Audubon Society, and it is to be hoped that they may long afford a harbor of refuge for the feathered wanderers yearly assembled from the Pacific wastes.

Washington, D. C.

THE ONLY KNOWN BREEDING GROUND OF *CRECISCUS* *COTURNICULUS*

By A. M. INGERSOLL

WITH TWO PHOTOS BY THE AUTHOR

DURING the past four seasons, probably more, a small colony of California Black Rails have made their home on a limited area of the weed-covered tide lands of San Diego Bay. These breeding grounds are between National City and Chula Vista.