

## GENERAL NOTES

**Subspecific status of *Fregata minor* along the Pacific coast of North America.**—Swarth (Condor, 35: 148–150, 1933), so far as known, was the first to record *Fregata minor* along the west coast of North America. The nearest previous records of occurrence for this species were the Hawaiian Islands and the Galapagos Islands; *Fregata magnificens* was the only species of the genus known from the western Mexican coast.

The specimens upon which Swarth's record is based consist of three adult males and three immatures from the Revillagigedo Islands, which are situated off the west coast of Mexico and south of the tip of the peninsula of Lower California at about 19° north latitude. Swarth, at the time, stated that no recognizable differences were apparent between the Revillagigedo series and specimens representing *Fregata minor ridgwayi* from the Galapagos Islands off the coast of Ecuador; hence he considered them as of that race.

The present writers have examined the specimens referred to by Swarth, as well as additional representatives of the species *minor* from the western Mexican coast, and fail to agree with his findings regarding the subspecific identity of these birds. There are twenty-seven skins of *ridgwayi* in the collection of the California Academy of Sciences. Comparison of the adult males from the two regions shows that the Mexican coast birds possess a predominantly purplish, rather than a greenish sheen to the lanceolate feathers of the back. One of the Mexican birds, however, is in process of molt and has but a few lanceolate feathers present on the back. These are greenish rather than purplish. It is possible that factors other than genetic ones are responsible for the color differences. The bills of the Revillagigedo specimens appear larger than those of *ridgwayi* on comparison and present a straighter outline along the culmen when viewed laterally. Furthermore, in transverse section the culmen is more rounded, somewhat resembling the species *magnificens* in this regard, rather than being flattened as in *F. minor ridgwayi*. A single immature male from latitude 14° 11' N., longitude 109° 20' W., taken on October 9, appears in bill character to be of the Revillagigedo type. What slight iridescence is present on the scapulars is purplish.

In all of the above-mentioned characters the population of *minor* from the Revillagigedo Islands shows a marked similarity to the race *palmerstoni* which occurs on Laysan Island and about the Hawaiian Islands. On comparing the adult males from the Mexican coast with four adult males of *palmerstoni* (three borrowed from the State University of Iowa, Museum of Natural History) only one slight, average difference was noted: a tendency toward a paler alar wing-bar in the former. This appears too slight to warrant any subspecific separation, hence the name *palmerstoni* is applied to the Revillagigedo Frigate-birds.

The resemblance of the western Mexican coast population of *Fregata minor* to the Laysan form, *palmerstoni*, which at its nearest breeding locality, the Hawaiian Islands, is approximately three thousand miles distant, appears strange in the case of a species which is not a pelagic wanderer. It is equally peculiar that such dissimilarity exists between Mexican coast Frigate-birds and members of the same species occurring on the Galapagos Islands, about eighteen hundred miles to the southeast.—A. J. VAN ROSSEM, *Dickey Collections, Los Angeles, California*, and R. T. ORR, *California Academy of Sciences, San Francisco, California*.