

FROM FIELD AND STUDY



The Brown Booby (*Sula leucogaster brewsteri*), adults and young at nest. Photograph taken on April 23, 1949, on George Island, in the Gulf of California, Mexico, by Ed Harrison and Frances Roberts.

Post-mortem Color Change in Bird Specimens.—Recently while working up a considerable collection of Fox Sparrows from Alaska, we had opportunity to compare a series of recently collected specimens with others that had been taken in the same localities on approximately the same dates (seasonally) fifty or more years ago. In doing this, we quickly reached the conclusion that it was useless to attempt to identify newly collected birds by comparing them with these older specimens.

We had available for use Ridgway's types of *Passerella iliaca fuliginosa* taken on June 10, 1897; *P. i. insularis* collected May 17, 1868; and *P. i. annectens* taken June 20, 1899. In addition to these types, we had a number of specimens of *P. i. fuliginosa* from or near the type locality that were 50 years old; a number from Kodiak that were taken before 1900; and a series from Yakutat Bay taken between June 19 and 23, 1899. A number of skins of *P. i. unalascensis* taken between 1885 and 1903 were also available together with an excellent series of *P. i. townsendi* taken between 1866 and 1908 from known breeding areas. The older material of *P. i. sinuosa* was less satisfactory, but we did have skins collected as early as 1920.

For comparison, we had a fine series of breeding birds from the type localities or from the same breeding localities and which had been taken on approximately the same seasonal dates as the older specimens. These were all taken between 1940 and 1950, largely in the period from 1943 to 1950.

When the older specimens were arranged according to geographic sequence and the more recently taken birds arranged in comparable order, the amount of foxing or color change was striking. It was apparent that although the newer specimens fitted the original descriptions, the types or older specimens from type localities did not. As we worked with them, notes were made of the differences in the colors of the backs in the two series when checked with Ridgway's color key. Believing that these notes will be of interest to other workers, they have been condensed and arranged by subspecies, as follows:

P. i. townsendi.—The type was not available, but a winter bird from the same locality on the Columbia River and now in the United States National Museum is considered a co-type. The color of the back of this bird is Prout's Brown, while recently taken fall and winter specimens vary from

Burnt Umber to Van Dyke Brown. A series of old skins from breeding areas vary from Warm Sepia to Bister, while recently taken birds from the same areas at comparable dates are Prout's Brown to Mummy Brown. This race showed the most marked color changes.

P. i. fuliginosa.—The type of this race is a breeding bird taken on June 10, 1897, at Neah Bay, Washington. Its color is close to Bister, although the series of older skins is between Raw Umber and Mummy Brown. Newer skins (1944), however, are Chestnut Brown.

P. i. annectens.—The old series (including the type) is close to Raw Umber, but for newly taken birds the color varies from Prout's Brown to Mummy Brown.

P. i. sinuosa.—The back color of the older skins is Raw Umber, although for those more recently taken it is Fuscous or very close to this shade.

P. i. insularis.—Back color of the fine series of older skins (including the type) is Raw Umber, but newly collected birds are Olive Brown.

P. i. unalascensis.—Older specimens are Natal Brown, while recently taken birds are slightly grayer than Olive Brown but still as close to it as to any other color.

It is obvious that specimens of the browner races have foxed somewhat more than have those of the grayer forms, but all show a tendency to increase in redness. The specimens in this group now have little value for comparative purposes unless they are used with skins of about equal age. Nevertheless, when newly collected birds of about equal age are compared, the races separate in the same sequence that is obtained when this is done with the older specimens.

In identifying birds of other species from coastal Alaska, we have watched carefully, but thus far have not found so marked a change for any other species. It is true that older skins of Song Sparrows collected from Yakutat Bay south to Washington show foxing to some degree, but the grayer forms to the westward do not show so marked a change of coloration. In none of the races of the Song Sparrow except in *Melospiza melodia caurina* and *M. m. rufina* is the change great enough to interfere with comparison for purposes of identification.—IRA N. GABRIELSON, *Wildlife Management Institute* and FREDERICK C. LINCOLN, *U. S. Fish and Wildlife Service, Washington, D. C., March 29, 1951.*

Migrants and Introduced Species in the Palau Archipelago.—Mr. Peter J. R. Hill, who served as Resident Naturalist for the Pacific War Memorial in the Palau Islands for some time, also made a collection of vertebrate and invertebrate forms for the Peabody Museum during the latter six months of his stay in 1950. Among the birds are several migrant or introduced species which may be mentioned as being of general interest in our knowledge of the fauna of these islands.

Sula leucogaster plotus. The Brown Booby has not actually been recorded from the Palau area, so it is worth noting that Mr. Hill obtained a specimen weighing approximately 633 grams, within the reef off Babelthuap Island.

Rallina eurizonoides eurizonoides. A male and female of this species were collected on Koror and Ngurukdapel islands in June and November. The birds were not in breeding condition. Comparison shows them to belong to the Philippine form. The male weighed 118, the female, 99 grams.

Cuculus fugax hyperythrus. A solitary male taken in February on Babelthuap Island is a new record for the archipelago. The bird weighed 92.5 grams.

Cacatua galerita triton. Two females taken on Ngurukdapel and Aulupsechel islands belong to the New Guinea race. They weighed 488 and 491 grams and were in forest, in one case one of a pair, in the other, one of a flock of four. One bird was coming into breeding condition. This evidence would indicate that Cockatoos are spreading in the Palaus and breeding there. Marshall (Condor, 51, 1949: 221) recorded Cockatoos on Koror.

Lariu roratus pectoralis. A solitary male New Guinea Eclectus Parrot was taken on Aulupsechel Island in May. It weighed 455 grams. Hill reports in his notes seeing a flock of ten of these birds, including green males and the red females, on Ngurukdapel Island in March, 1950, so possibly these stray captive birds have become established as a second breeding species of Psittacidae in the Palau group.

Lonchura ferruginosa (near *formosana*). The Chestnut-bellied Munia is apparently breeding in the Palaus. Specimens including an immature male were taken on Babelthuap and Koror. This is possibly a hybrid population as might be expected in released cage birds. A female and young bird are near *formosana*, the adult female particularly in having the occiput and nape dark brown rather than black. An adult male on the other hand has the entire head black as in *rubronigra*.