

**A specimen of the Red-footed Booby from Florida.**—On 30 September 1963, one day after strong southwest winds swept over the west coast of Florida, Mr. and Mrs. John P. Cady found a weakened sea bird on the Gulf shore of Clearwater Beach approximately one mile south of Carlouel in Pinellas County. The next day the bird was given to Richard G. Naegeli, Director of Busch Gardens (containing extensive aviaries maintained by the Anheuser-Busch Company); it died that evening and the frozen specimen was given to me about two weeks later. The bird was identified as a Red-footed Booby (*Sula sula*) and preserved as a skin and body skeleton (G.E.W. 2325). The specimen, a male (left testis  $8 \times 3$  mm, right testis  $5 \times 1$  mm), weighed 518.5 g and had no integumentary fat. The soft parts, recorded from the frozen specimen, were as follows: bill pink, distal one-quarter dusky brown; base of mandible, gular pouch, and naked skin of face bluish, the latter the darkest; irides cream; feet flesh colored. The plumage is similar to that described by R. S. Palmer (*Handbook of North American birds*, vol. 1. New Haven, Yale Univ. Press, 1962; see p. 297.) for *Sula sula sula* under white phase "predefinitive stage," type one, and the specimen is assigned to the nominate race on this basis. Several plumages occur in each of the several races of this booby and much more must be learned before the complexities of its geographic variation are fully understood. Therefore a brief description of the Florida specimen seems in order.

In addition to the essential features of the plumage just mentioned above, the faint dark breast band of the juvenal plumage and the golden wash of the definitive basic (adult winter of Dwight) plumage are present (see Palmer, *op. cit.*, p. 296), and the feathers of the thigh are dark brown. The four outer tail feathers on each side are new and grayish brown with a silvery bloom and whitish tips. The outermost primary on each side is worn and a faded blackish brown. The other primaries show little wear and possess the silvery bloom; the second primary from the outside on both sides is not fully grown. The soft part colors, listed above, were a combination of those assigned by Palmer to the two types of predefinitive stages.

The measurements in millimeters are: wing (arc), 350 (badly worn); tail, 209 (badly worn); tarsus, 35.5; culmen, 81; and total length, approximately 700 (27.5 inches). Palmer (*op. cit.*, p. 295) gives for the wingspread of *S. sula* 36 to 40 inches. Unfortunately I neglected to take this measurement on the Florida specimen, but the combined lengths of the humeri, ulnae, and wing chords total 54 inches (distance between shoulders excluded to compensate for angles between wing elements), indicating that the range given in the *Handbook* is in error. A small amount of tar is on the feathers of the nape and right shoulder, and many contour feathers in this area are missing, possibly the result of preening.

Two specimen records of *S. sula* exist for the continental United States, from near Rockport, Texas, and Buras, Louisiana (Palmer, *op. cit.*, p. 298). An additional sight record, of many Red-footed Boobies along the Atlantic coast of Florida east of Micco (near Sebastian Inlet, Brevard County), on 16 February 1895 after a severe storm was reported by Outram Bangs (*Auk*, 19: 395–396, 1902). The "hundreds perhaps thousands" of boobies (a remarkable occurrence in itself) seen by Bangs were of three principal plumages, two of which he assigned to age classes of the Brown Booby (*Sula leucogaster*). The third and most abundant type of plumage was worn by a bird that was primarily white "with conspicuous blackish flight feathers" and which was said to be smaller. On the basis of the smaller size reported, Bangs thought them to be Red-footed Boobies. However, the Blue-faced or Masked Booby (*Sula dactylatra*), also primarily white and, further, of regular occurrence on

the Florida Atlantic coast, is roughly similar in size to the other two boobies. Differences in proportions between *S. dactylatra* and *S. sula* (the latter is smaller in size but with longer tail) make field identifications based on size alone somewhat doubtful. The best field mark, the color of the tail, cannot be determined from Bangs' note. He records the flight feathers as black but does not explain if this includes the tail.

Two of R. T. Peterson's field guides (*A field guide to the birds*, 1947, and *A field guide to the birds of Texas*, 1960, both Houghton Mifflin Co., Boston) are misleading in the identification of boobies. Both state that only the primaries are black in the Red-footed Booby (actually portions of the secondaries and certain coverts are also black); both give the total length of the Blue-faced Booby as less than that of the Brown Booby (it actually averages larger); and neither mentions the confusing sub-adult plumages of the Red-footed Booby. The descriptions and drawings in the section on the Hawaiian Islands in his more recent guide (*A field guide to western birds*, Houghton Mifflin Co., 1961) appear correct.

The storm which immediately preceded the occurrence of the specimen on the Florida west coast had its center in the Bay of Campeche on 27 September 1963, according to Gordon E. Dunn, meteorologist at the Miami weather bureau. At noon on 28 September its center was near 25° N lat. and 90° W long. It passed over the west coast of Florida at approximately 1200 hours on 29 September with winds of 50 to 65 miles per hour being reported.

It was only through the continued efforts of Carl C. Radder of the St. Petersburg Audubon Society that I was able to locate Mr. and Mrs. Cady and thereby establish the exact date and locality for the specimen. I thank Robert H. Fuson for the weather data and Andrew J. Meyerriecks for constructive criticism of the manuscript.—GLEN E. WOOLFENDEN, *Department of Zoology, University of South Florida, Tampa, Florida.*

**Breeding record for Redhead in Alaska.**—On 10 August 1962 I was with U. S. Fish and Wildlife Service personnel when approximately 10,000 waterfowl were driven into a large holding pen located on the northeast side of Ohtig Lake, Alaska (see J. G. King, *J. Wildlife Mgmt.*, 27: 356-362, 1963). Ohtig Lake, which is roughly four miles long and one and one-half miles wide, has been used by molting ducks for many years according to Indians of that area. The Arctic Circle passes through the southwest portion of the lake, which is 44 miles directly east of Fort Yukon.

In the captured flock of molting ducks, which included Lesser Scaups (*Aythya affinis*), Greater Scaups (*A. marila*), Canvasbacks (*A. valisineria*), Barrow's Goldeneyes (*Bucephala islandica*), Buffleheads (*B. albeola*), White-winged Scoters (*Melanitta deglandi*), Shovelers (*Spatula clypeata*), Pintails (*Anas acuta*), American Widgeons (*Mareca americana*), and 23 adult Redheads (*Aythya americana*), were a few young birds. The young ducks included downy Lesser Scaups, four downy Canvasbacks, and one downy Redhead.

On 11 August nearly 600 of these captured birds were banded and released. In this group was the downy Redhead and some downy scaups. Photographs were taken of the Redhead with a Lesser Scaup of similar age for comparison.

This record is apparently the first definite evidence of Redheads breeding in Alaska (see I. N. Gabrielson and F. C. Lincoln, *Birds of Alaska*, Harrisburg, Pennsylvania, Stackpole Co., 1959; p. 177).—CHARLES F. YOCOM, *Division of Natural Resources, Humboldt State College, Arcata, California.*