- IMHOFF, T. A. 1960. Central Southern Region. Audubon Field Notes, 14(5):
- Mayfield, H. 1951. Middlewestern Prairie Region. Audubon Field Notes, 5(5): 291-292.
- Newman, R. J. and S. L. Warter. 1959. Central Southern Region. Audubon Field Notes, 13(5): 434-437.
- Samuels, E. A. 1870. The Birds of New England. Noyes, Holmes and Co., Boston, Massachusetts, pp. 591.
- Scott, F. R. and J. K. Potter. 1959. Southern Atlantic Coast Region. Audubon Field Notes, 13(5): 422-424.
- and D. A. Cutler. 1963. Middle Atlantic Coast Region. Audubon Field Notes, 17(5): 452-454.

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# LONGEVITY RECORDS OF SOME CENTRAL PACIFIC SEABIRDS

By Roger B. Clapp and Fred C. Sibley

During extensive field work in the Central Pacific from 1963 through 1965 personnel of the Pacific Ocean Biological Survey Program of the Smithsonian Institution recaptured a number of seabirds banded by earlier workers. Some of these recoveries involve species for which there are no published longevity records (e.g., Red-footed Booby (Sula sula), Red-tailed Tropicbird (Phaethon rubricauda), and Blue-faced Booby (Sula dactylatra); other recoveries corroborate or extend data obtained by other workers (e.g., Laysan Albatross (Diomedea immutabilis), Sooty Tern (Sterna fuscata)).

Most of the recoveries were of birds banded either on Howland Island or at Ulupau Head, Mokapu Point, Oahu, by George C. Munro, a pioneer in Hawaiian ornithology, or by individuals cooperating with him. Several other records are recoveries of birds banded by the Denver Wildlife Research Center on Sand and Eastern Islands, Midway Atoll.

These longevity records are presented in Table 1, and their significance is discussed below.

# Laysan Albabross (Diomedea immutabilis)

Rydzewski (1963) noted that the longevity record for Laysan Albatross was 7 years 8 months, but an earlier reference (Rice, 1959) listed no less than seventeen birds between eight and twenty-one

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Table 1. Longevity Records of Central Pacific Seabinds

Species/Band Nos.	Date Banded	Age when Banded	Date Recovered	$ m Minimum \ Longevity$	Location of Banding	Location of Recovery
Laysan Albatross: 40-720951 44-725374 508-65340 508-65443	6/1/46 1/28/51 11/30/54 11/30/54	juvenile adult adult adult	12/29/64 11/16/63 12/3/63 12/3/63	18 yrs 7 mo. 13 yrs 10 mo. 10 years 10 years	Midway Atoll Midway Atoll Midway Atoll Midway Atoll	Kure Atoll Kure Atoll Midway Atoll Midway Atoll
Red-tailed Tropicbird: 525-23954 Blue-faced Booby:	11/16/54	adult	6/25/63	8 yrs 8 mo.	Midway Atoll	Midway Atoll
41-720687 41-720690 41-720664 41-720617	9/11/41 9/11/41 9/11/41 9/11/41	juvenile local local local	7/24/64 2/9/64 10/20/63 7/8/63	22 yrs 8 mo. 22 yrs 3 mo. 22 yrs 1 mo. 21 yrs 8 mo.	Howland Is. Howland Is. Howland Is.	Howland Is. Howland Is. Howland Is.
Red-footed Booby: 44-725087	6/14/47	juvenile	3/1/65	17 vrs 8 mo.	помани 18.	Howland Is.
44-725135	6/14/47	juvenile	2/23/64	16 yrs 8 mo.	Oahu Ulupau Head,	Oahu Ulupan Head
44-725037	6/14/47	juvenile	11/27/63	16  yrs  6  mo.	Oahu Ulupau Head,	Oahu Ulupan Head
40-735534	7/17/48	local	3/15/64	15 yrs 8 mo.	Oahu Ulupau Head, Oahu	Oahu Moku Mahu Is. Oahii
						nino.

Table 1. Longevity Records of Central Pacific Seabirds

Species/Band Nos.	Date Banded	Age when Banded	Date Recovered	Minimum Longevity	Location of Banding	Location of Recovery
Red-footed Booby: 44-725420	4/2/49	adult	2/1/64	14 yrs 10 mo.	Ulupau Head Oahu	Ulupau Head, Oahu
44-725478	6/13/49	adult	4/8/65	15  yrs  10  mo.	Ulupau Head, Oahu	Kilauea Light- house, Kauai Is.
44-725560	6/23/49	local	2/1/64	14  yrs 7 mo.	Ulupau Head, Oahu	Ulupau Head, Oahu
44-725623	9/28/49	immature	2/1/64	14 yrs 4 mo.	Ulupau Head, Oahn	Ulupau Head, Oahu
40-735624	6/7/50	local	2/1/64	$13 \mathrm{\ yrs}\ 7 \mathrm{\ mo}.$	Ulupau Head, Oahu	Ulupau Head, Oahu
Sooty Tern: 38-312056 38-312129	7/22/38 7/22/38	juvenile juvenile	2/2/65 $10/13/64$	26 yrs 7 mo. 26 yrs 3 mo.	Howland Is. Howland Is.	Howland Is. Howland Is.

years of age. The four birds recaptured by the POBSP, and listed in Table 1, are all older than Rydzewski's record; the first individual listed (40-720951) is one of the oldest albatross recorded, rivaling in longevity Rice's record Laysan Albatross and the "at least 18 year old" Black-footed Albatross recorded by Yocum (1963).

It seems likely that many albatross species regularly attain such ages in the wild (see Rydzewski 1962). However, due to the relative newness of albatross banding and to a paucity of published records, we know little about albatross longevity.

### **Red-tailed Tropicbird** (*Phaethon rubricauda*)

This bird (525-23954) banded as an adult, was at least ten years old since young tropicbirds usually spend at least two years away from their natal islands before returning (unpublished POBSP data).

When the bird was recovered its band was almost worn through, and the numbers could only be read by etching. Potential Redtailed Tropicbird longevity is thus over ten years, and the paucity of longevity records is very probably due to band loss through wear.

#### **Blue-faced Booby** (Sula dactylatra)

In a period from 1938 to 1941 George C. Munro and his assistants banded 630 Blue-faced Boobies on Howland Island. Three-hundred and thirty three adults were banded in 1938 and 1940, and 300 nestlings were banded in 1941. In 1963-1965 Smithsonian personnel recaptured four of the birds banded as nestlings, but none of those banded as adults.

Smithsonian personnel have handled about 85-95 percent of the Blue-faced Boobies on Howland, having banded over 3700 adults. If any of the adults banded in 1938 and 1940 had been present it seems likely that at least one would have been captured.

The four birds which we recaptured were about 22 to 23 years of age and had the 1938-1940 adults been present, they would have been about 25-29 years old. Apparently few Blue-faced Boobies reach ages much greater than 23 years.

One of the Blue-faced Boobies (41-720617) banded by Kilihananni in 1941 was captured on a nest by Smithsonian personnel. This bird was breeding at about 22 years of age.

# Red-footed Booby (Sula sula)

One Red-footed Booby (44-725478) at least 17 years old was incubating an egg when recaptured on Kauai, 100 miles northwest of its banding locality on Oahu.

## Sooty Tern (Sterna fuscata)

Longevities of 28 years have been recorded for two Sooty Terns from the Dry Tortugas in the Atlantic Ocean (Austin, 1965). The two 26-year-old Sooty Tern recaptures by the Smithsonian on Howland Island suggest that similar longevities are attained in the two populations.

#### LITERATURE CITED

Austin, O. L. 1965. Longevity and Mortality in the Sooty Tern. AOU. Abstracts, 83rd Meeting. August 23-27, 1965.

RICE, D. W. 1959. Birds and Aircraft on Midway Islands, 1957-58 Investigations. Spec. Sci. Rept-Wildlife No. 44, Fish and Wildlife Service, U. S. Department of the Interior.

Rydeewski, W. 1962. Longevity of Ringed Birds. The Ring 33: 147-152.

RYDZEWSKI, W. 1963. Longevity Records II. The Ring 34: 177-181.

YOCUM, C. F. 1965. Longevity Record of a Black-footed Albatross. Condor 67: 187.

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# RINGING (BANDING) AND RECOVERIES OF PHALAROPES

### A Summary of Presently Available Information

By E. O. Höhn

In connection with a publication on the phalaropes for the series "Die Neue Brehm Bücherei" (A. Ziemsen Verlag, Wittenberg) I have attempted to ascertain the numbers of phalaropes ringed so far, as well as to obtain details of any recoveries of marked birds. Letters were written to all countries in the territories of which phalaropes nest, with the exception of Britain which has only a very small breeding population, about which I enquired in this connection in person in mid-1963, at the British Museum, Natural History. Some replies were received too late for inclusion in the above mentioned publication, hence this note and no reply has as yet been received from Finland.

A tabular summary of the information collected is given below. Since some phalaropes may well have been secured and ringed while on passage or on their wintering grounds and as there might also be recoveries of ringed birds from such areas, the presentation of this information is made with the hope that individuals who have additional information on this topic will communicate with the author of this note.

The approximate recovery rate which can be deduced from the data in the table suggests that the ringing of birds of this group is not such a thankless proposition as one might be inclined to think. Information on the wintering areas of Wilson's Phalaropes is still far from complete. The use of some form of color marking would be