

GENERAL NOTES

First North Atlantic record of the White Tern.—Extreme extralimital vagrancy is common in seabirds, particularly among the petrels of the order Procellariiformes (Bourne 1967). It is also known in tropical terns, Sterninae, but is less well-documented (e.g. Peterson and Watson 1971). We report here a record of a White Tern (*Gygis alba*) on Bermuda. So far as we can determine this is the first recorded occurrence of the species north of the Equator in the Atlantic Ocean. What is particularly remarkable about this record is that the individual appears to be a vagrant from the Pacific Ocean rather than from the tropical South Atlantic Ocean where it also breeds.

The bird was observed and photographed at less than 3 m in the Great Sound, Bermuda from 7–9 December 1972 by Wingate (Figure 1). It was feeding on fry (small baitfish of the herring family) in company with a flock of Common Terns (*Sterna hirundo*) and, compared with that species, seemed similar or only slightly smaller in size. Unlike the Common Terns, which were "surface plunging" to catch fry, this bird was swooping and catching the fish in midair as they jumped—the "air-dipping" method of feeding typical of the White Tern (Ashmole and Ashmole 1967). During most of the time that it was observed, it remained flying and very active, moving rapidly from one school of jumping fry to another. Only rarely did it settle on buoys and reef markers where it was invariably displaced by the more aggressive Common Terns.

The White Tern appeared to be in good condition with immaculate plumage, although obviously undergoing wing and tail molt (Figure 1). There were no signs of feather wear or fouling to suggest that it might have been transported in captivity.

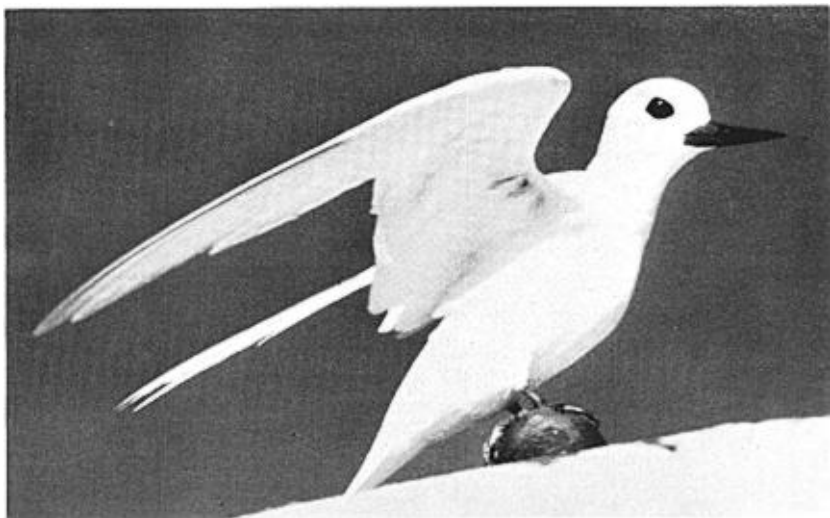


Figure 1. White Tern in Great Sound, Bermuda 7 December 1972. Note feathering and extensive blue area at base of bill, dark rhachis on outer primary and wing molt.

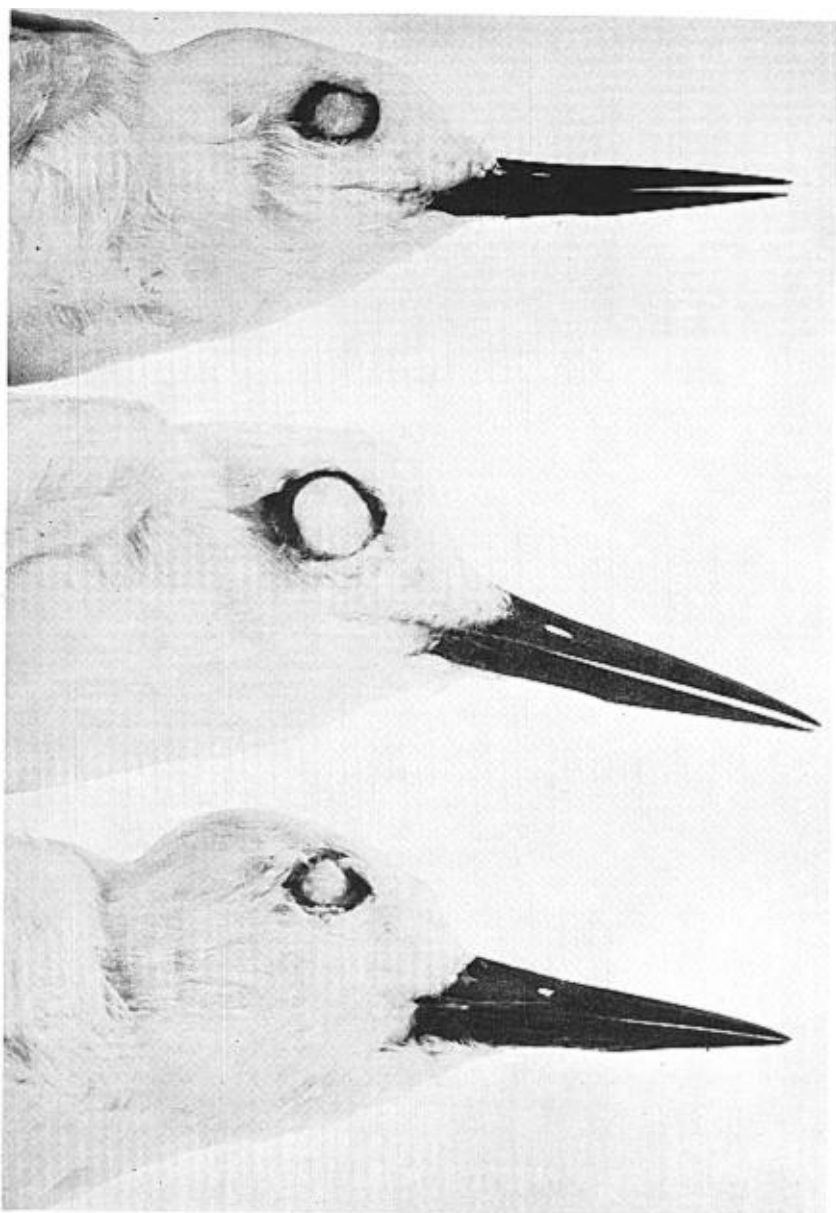


Figure 2. Heads (from top to bottom) of *Gygis alba microrhyncha* from Marquesas Islands, *G. a. alba* from Ascension Island and *G. a. candida* from Clipperton Island.

Two groups of subspecies of White Terns are occasionally treated as distinct species. One, which is represented by a number of named subspecies in the Pacific and Indian Oceans, can be conveniently called the *candida* group. It has a deeply forked tail, dark rhaches on the primaries, a relatively deep bill with a pronounced blue area near the base, and a straight diagonal margin between the facial feathering and the maxillary rhamphotheca (Figure 2). The other group consists of two subspecies, nominate *alba* in the Atlantic (breeds on Fernando Noronha, Martin Vas, Trindade, Ascension, and St. Helena) and *microrhyncha* in the Marquesas and possibly some of the Line and Phoenix Islands in the east central Pacific Ocean. These *alba-microrhyncha* birds have a less deeply forked tail, far less dark pigmentation on the primary rhaches, a slender bill with little blue at the base, and loreal feathering that extends in an acute angle forward on the bill toward the nostril (Figure 2). Pacific Ocean *microrhyncha* is markedly smaller and has a less deeply forked tail, and a much more slender bill than Atlantic Ocean *alba*.

Surprisingly, the tern photographed on Bermuda (Figure 1) shows clearly the bill characters and dark primary rhachis pigmentation of the *candida* group rather than those of the Atlantic *alba* population as one would have expected. It is impossible to ascertain from the photograph, however, whether it belongs to north Pacific *pacifica*, south central Pacific *candida*, or Indian Ocean *monte*, which only differ slightly in average measurements (Baker 1951: 174-181). We suppose that if the Bermuda individual was in fact a vagrant, it more probably was *candida*, from one of the nearer eastern Pacific islands (Clipperton, Cocos, or Revilla Gigedo), that crossed the Isthmus of Panama, rather than *C. a. monte* that made the longer journey from the Indian Ocean around the Cape of Good Hope.

We have sought in vain a simple meteorological explanation for this record. R. L. Pyle of the National Oceanic and Atmospheric Administration has examined for us National Weather Service daily analyses of the Tropical Oceanic Lower Level (up to 800 m) from 1 October through mid-November 1972. They show a persistent wind flow from the east and northeast throughout the Caribbean-Antillean region. Likewise in the eastern Pacific, the normal col area of light variable winds was present south and west of the isthmus most of the period, with light easterly and northeasterly winds north to 25° N and beyond. The same general wind patterns existed up to at least 1,600 m and probably well beyond that height. Although these wind patterns would not have hindered a White Tern from traveling east from the Pacific Ocean, there were no anomalously favorable winds to have assisted it. Nor were there any abnormal weather patterns at Bermuda during the 2 months prior to this sighting.

Ashmole and Ashmole (1967: 66, 97) have suggested that the White Tern is adapted for feeding at low light intensities far at sea and, like the Sooty Tern (*Sterna fuscata*), may sleep on the wing (Ashmole 1963). Wingate observed behavior in an immature Sooty Tern over Castle Harbor, Bermuda, that strongly suggested it had been sleeping on the wing. The bird was drifting downwind in wide circles at 20 m altitude in the wake of a passing hurricane. It narrowly missed a high rock and nearly flew into a hillside of the main island before suddenly breaking its aimless drifting and flying back out of the harbor. Inland vagrant records of petrels, tropicbirds, frigatebirds, and terns suggest that seabirds may occasionally soar to great heights and get blown far inland over the continents, especially in overcast or stormy conditions (e.g. A.O.U. 1957: 18, 19, 27, 40, 237, 328).

We lean toward the view that the White Tern recorded on Bermuda was a vagrant *candida* that crossed the isthmus passively, possibly while asleep on the wing, but cannot account for its occurrence at the latitude of Bermuda in December. It seems far more likely that an individual of this species entering the Caribbean would have remained in the vicinity of the Antilles, but Bond (in litt.) knows of no records from that area.

In view of this, the possibility that the bird was transported by ship either having come aboard to rest or as a temporary captive cannot be completely excluded. Inasmuch as Bermuda is visited by ships that enter the Atlantic Ocean both from the Pacific Ocean through the Panama Canal and from the Indian Ocean around the Cape of Good Hope, if a captive it could just as likely have been *G. a. monte* from the Indian Ocean.

We are grateful to R. A. Slaughter who took the color slide from which Figure 1 is reproduced, to S. L. Olson who pointed out to us unresolved systematic problems in the Pacific Ocean populations, and R. L. Pyle for looking up and interpreting meteorological information for us.

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DAVID B. WINGATE, *Department of Agriculture and Fisheries, P. O. Box 834, Hamilton, Bermuda*, and GEORGE E. WATSON, *National Museum of Natural History, Smithsonian Institution, Washington, D. C. 20560*. Accepted 10 Jun. 73.

Summer Tanager southern range extension in Chile.—The Summer Tanager, *Piranga r. rubra*, is a regular migrant from the southern United States to Mexico, Central America, and northwestern South America. The most southern specimens on record are from western Bolivia and western Brazil (1957, Check-list of North American birds, fifth ed., Baltimore, Amer. Ornithol. Union, p. 545). R. Meyer de Schauensee (1970, *A guide to the birds of South America*, Wynnewood, Pennsylvania, Livingston Publ. Co., p. 390) mentions *Piranga rubra* as "Acc. in Chile," based (pers. comm.) on the specimen here recorded, but without date or locality. In August 1968 I received a mummified specimen from the late Rodulfo A. Philippi that represents the southernmost winter record for the species and the first record for Chile.

In February 1969 Philippi gave me the following particulars: the bird was found dead on the railroad track at Portezuelo station on the Antofagasta-Bolivia Railway on 12 March 1968. This station is in the province of Antofagasta and is situated southeast of Salar del Carmen, about 25 km southeast of the city of Antofagasta,