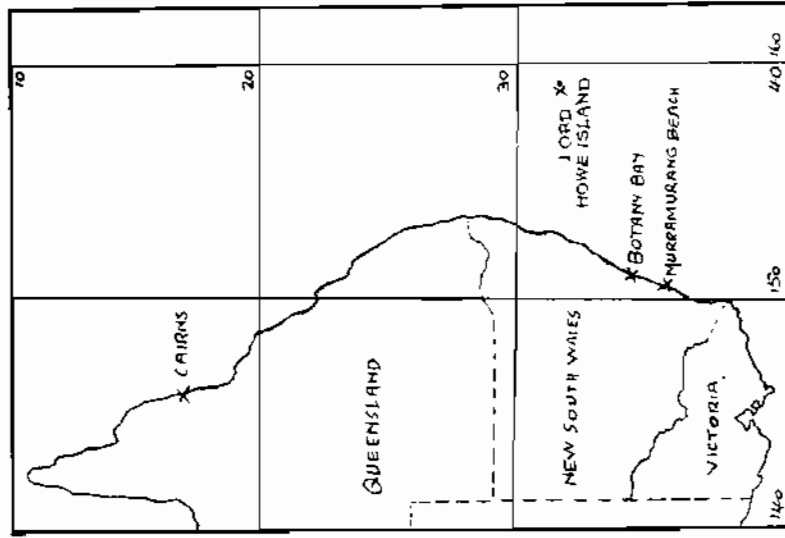


The Occurrence of the White-tailed Tropic-bird in Australia

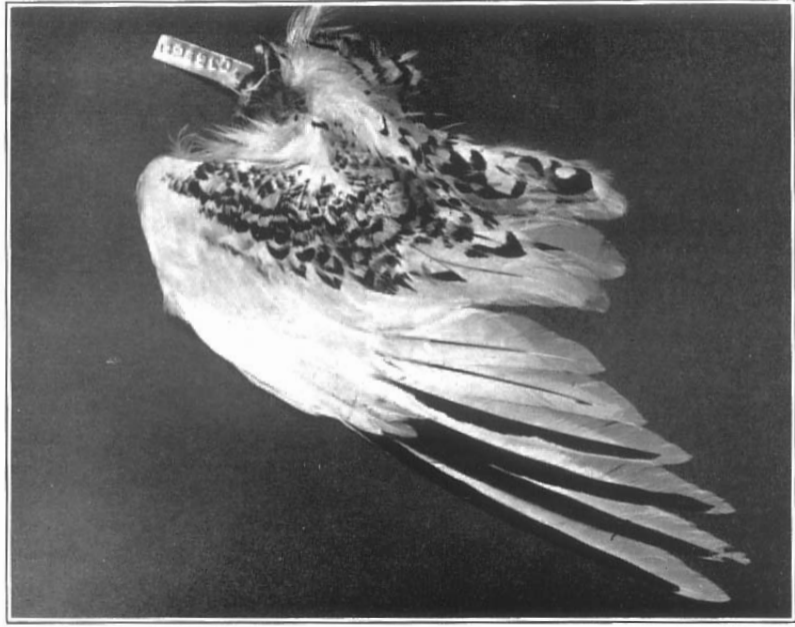
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The White-tailed Tropic-bird (*Phaëthon* (*Leptophaëthon*) *lepturus*) has a wide distribution throughout the tropical oceans of the world. Many writers on Australian ornithology have included the northern and portions of the western coast in the distribution of the species without quoting any references to the definite occurrence of the species in those parts. The only authentic records I have been able to trace refer to the east coast. On February 13, 1898, a bird in immature plumage was picked up in a dying condition at Botany Bay, near Sydney, after extremely heavy easterly gales. The skin, now in the Australian Museum collection (No. 0.10003), was briefly described by A. J. North¹ and later in more detail by J. R. Kinghorn.² North also referred to portion of a skin (No. 0.3737) of an immature bird, in the Museum, obtained at Lord Howe Island in May, 1890. Lord Howe Island is some three hundred miles east of Australia in latitude 31° south. The second known specimen to be taken on the east coast of Australia was an adult bird procured at Cairns, Queensland, in October, 1906, and figured by G. M. Mathews in his *Birds of Australia*.³ I am now able to record a third specimen from eastern Australia. On February 2, 1938, I found the remains of a bird in immature plumage on Murramurang Beach, which is south of Jervis Bay, and near Brush Island, on the south coast of New South Wales, some 130 miles south of Sydney. Unfortunately, Ravens (*Corvus coronoides*) had mutilated the body, and the head was missing. At the time I was not aware of the identity of the bird, but, as it was new to me, I brought back a leg and a wing to Sydney for comparison; the parts are now in the Australian Museum collection (No. 0.36962). For several days prior to the finding of the bird the weather had been stormy, and many birds of several kinds were washed up on Murramurang and other nearby beaches. Excepting the Tropic-bird, all were species normally found in these parts, and included dozens of Wedge-tailed Shearwaters (*Puffinus pacificus*), a few Short-tailed Shearwaters (*P. tenuirostris*), many Gannets (*Sula serrator*), both adult and immature, several Little Penguins (*Eudyptula minor*), adults and young, and an immature Black-browed Albatross (*Diomedea melanophris*). The remains of the Tropic-bird were quite fresh and not even partly covered with sand as generally happens within a day or two of bodies being cast on the beaches.

Comparison of the remains of this bird with the specimen from Botany Bay reveals that the wing is shorter by 13



Localities on the eastern coast of Australia and Lord Howe Island where specimens of the White-tailed Tropic-bird have been taken.



Wing of White-tailed Tropic-bird found at
Murrumurang Beach.

Photo. by K. A. Hindwood.

mm. ($\frac{1}{2}$ inch), the tarsus is the same length, 20 mm., but slenderer, as are the claws. The markings on the wing coverts and inner secondaries are black with a very faint indication of brown, whereas in the Botany Bay bird such markings have a distinct brownish tinge; also the black stripes along the inner webs of the three outer primaries are noticeably narrower.

In the Pacific Ocean the White-tailed Tropic-bird occurs in the Hawaiian, Marquesas, Tuomatu, Samoan, Tongan and Fiji Islands, in New Caledonia, and in the Marshall, Gilbert, Pelew, Caroline and Marianne Islands. It has been recorded as a breeding species from several of those localities, though not, so far as I am aware, from any of the Islands in the south-west Pacific as stated by various workers. No doubt future investigations will reveal breeding-stations of the species in that part of the Pacific, i.e., the sector south of latitude 10° south and west of longitude 180° east, which is the probable normal range of the stray birds, particularly the immature specimens, occurring on the east coast of Australia. The most reasonable assumption is that these wanderers come from New Caledonia, where the species has been recorded. Possibly there are breeding records for New Caledonia, but the literature on Tropic-birds generally is so scattered that such accounts could easily be overlooked. No concerted work appears to have been done on the group as a whole, although Murphy has summarized⁴ the available data on the equatorial Atlantic form, or forms, of the White-tailed Tropic-bird. It may be mentioned in passing that there are no specimens from Australia of the White-tailed Tropic-bird in the British Museum.

The specimen from Cairns figured by Mathews is the type of the sub-species *dorotheæ*⁵ which, he states, differs from the species in "having less black on the wings, and in having a red bill.* The name *dorotheæ* appears to be in general use for the bird ranging throughout the Pacific Ocean, the distribution of which is given by Mathews as "Queensland, some Pacific Islands and Japan."⁷ Presumably that includes all the islands in the Pacific where the species has been collected and is not used in any more restricted sense, and, if that is so, there is no justification for his bare statement "Breeding on Fiji Islands?"[†] Finsch⁸ records breeding birds from the Pelew group: Oustalet⁹ stated that the species nested in the Marianne and Caroline Islands; and both Perkins¹⁰ and Henshaw⁶ have recorded it nesting in the Hawaiian Islands.

* According to Henshaw⁶ the bill of the bird occurring in the Hawaiian Islands is "greenish yellow, indeterminately marked with bluish black." It is probable that there is considerable variation in the colour of the bill in different localities, or that it changes in the breeding-season. Mathews' bird was taken in October.

† Mathews earlier described³ an egg of the species from Fiji; it would seem that such record is not now acceptable.

In any case, the three definite Australian records are, in each instance, almost a thousand miles or more from the nearest likely breeding place, which is New Caledonia. Murphy⁴ has shown that the species is a great wanderer, and in the Atlantic Ocean regularly occurs, after the breeding-season, as far north as latitude 40° north. It may be assumed that the Pacific Ocean birds also wander over wide stretches of ocean, and that would account for the appearances of individuals on Lord Howe Island and the east coast of Australia. Doubtless many more birds reach Australia than are recorded, for it can be seldom that the circumstances are opportune for observation.

Campbell¹¹ has recorded the White-tailed Tropic-bird as an occasional visitor to Houtman's Abrolhos on the west coast of Western Australia, and elsewhere¹² that it has been observed in those parts. As pointed out by Alexander,¹³ Campbell does not say that he saw the species himself or on what evidence he relied, therefore the record requires substantiation. According to Mathews,³ no breeding place of the species, in the Indian Ocean, is known nearer than the Seychelles, off the coast of Africa. A distinct species (*P. fulvus*)—by some workers¹⁴ considered a sub-species of *lepturus*—breeds on Christmas Island, near Java; if *P. lepturus* has been taken on the west Australian coast, a breeding locality much nearer than the Seychelles is suggested.

My thanks are expressed to Mr. W. B. Alexander for several of the references quoted and for other information.

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