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A MELANISTIC WHITE-TAILED TROPICBIRD

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Since Clapp and Huber (Condor 73:123, 1971) have reported an imperfect albino of the Red-tailed Tropicbird (*Phaethon rubricauda*), it seems worthwhile to put on record a melanistic individual of the White-tailed Tropicbird (*Phaethon lepturus*), especially inasmuch as it has some bearing on geographic variation in the species. The bird in question (Yale Peabody Museum, YPM 44055) is an adult male taken on 3 April 1926 at the island of Fernando de Noronha, South Atlantic Ocean, by the "Blossom" Expedition of the Cleveland Museum.

The specimen differs most markedly from the normal plumage of the species in having nearly the whole crown and nape black rather than white (fig. 1). In normal specimens, the feathers of the crown and nape have black bases and the white feathers of the upper back, throat, and upper breast have black shaft streaks of varying width. Crown feathers of juveniles are normally spotted with black and a few adults show some similar spotting but none of the many specimens examined at YPM, the American Museum of Natural History (AMNH), or the National

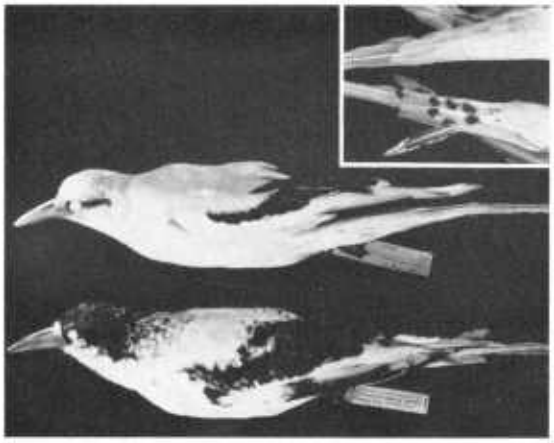

FIGURE 1. Melanistic *Phaethon lepturus*, YPM 44055, Fernando de Noronha (below) compared with normally plumaged bird USNM 434284, Aseension (above). Inset: ventral view of rectrices with melanistic bird below, normal bird above.

Museum of Natural History (USNM) shows any real approach to the condition of the melanistic bird. In the latter, some of the normally unpigmented greater and lesser secondary coverts are black and some of the scapulars are tipped with black, both combining to make the black wing bar wider. The primary coverts and the outer webs of the alular feathers are mostly black rather than white as in normal birds. The tip of each rectrix, except for the elongate middle pair, bears a conspicuous black spot (fig. 1, inset) and the shaft of each is also pigmented.

The melanistic specimen belongs to the subspecies *ascensionis* which includes the populations of Fernando de Noronha, Ascension Island, and the Gulf of Guinea. This race, as Murphy (Oceanic birds of South America, Am. Mus. Nat. Hist., N.Y., p. 802, 1936) states, has "never been satisfactorily distinguished from the typical or Indian Ocean race." However, he goes on to say (p. 803), "birds of the Bermuda-West Indies subspecies, *Phaethon lepturus catesbyi*, differ from the equatorial and South Atlantic representatives in that the black area on the outermost primary extends close to the tip; on the second and fourth from the outermost it practically reaches the tip; while the third from the outermost quill is entirely black or no more than very narrowly tipped with white. There

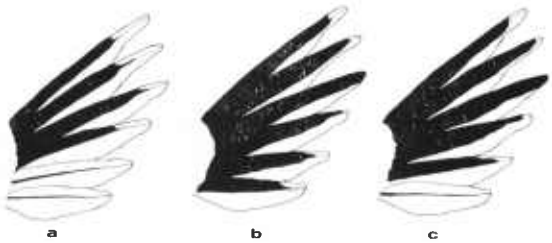

FIGURE 2. Outer primaries of *Phaethon lepturus*. a. normal *ascensionis* YPM 44061, Fernando de Noronha. b. melanistic *ascensionis* YPM 44055, Fernando de Noronha. c. normal *catesbyi* USNM 316316, Haiti.

is also much more black in the fifth from the outermost quill. All of these black marking of the remiges are remarkably conspicuous when the birds are in flight." With respect to the five outermost primaries, the melanistic specimen of *ascensionis* is *identical* to *catesbyi* (fig. 2). The sixth from the outermost primary has the outer web almost entirely black. The base of this web may be black in some individuals of *catesbyi* and to a lesser extent in *ascensionis* as well. The seventh from the outermost primary of the melanistic bird has a broad (4 mm), black median streak extending to within 18 mm of the tip. This primary was unpigmented, except for the shaft itself, in other specimens of the species examined.

The precise duplication of the *catesbyi* pattern in the melanistic individual of *ascensionis* suggests that this racial character of *Phaethon lepturus* may be the result of a simple melanic allele that is expressed in one population and not in the others. The presence of melanin in primaries appears to reduce wear (Averill, Condor 25:57, 1923), but it is difficult to believe that the primaries of *catesbyi* are subject to greater wear than those of all other populations of the species. Therefore the selective advantage, if any, of the allelic shift in *catesbyi* is not apparent.

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