

THE SCIENTIFIC NAME OF THE INDIAN YELLOW-NOSED ALBATROSS

THALASSARCHE CARTERI

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Peter's checklist of the birds of the world (Mayr & Cottrell 1979) lists only *Diomedea chlororhynchos* Gmelin 1789 (based on Latham, 1785, and locality Cape of Good Hope) for all the Yellow-nosed Albatross breeding locations and provided no synonyms. However, two taxa had previously been described, long regarded as representing a subspecies of *D. chlororhynchos*, distinct from the nominate race. The first was *Thalassogeron carteri* Rothschild 1903 from Point Cloates, North-west Australia, whilst the second was *Diomedea bassi* Mathews 1912 (Mathews, 1912a) from East Australia. Godman (1910) illustrates *chlororhynchos* and *carteri* noting that the specimen of *chlororhynchos* was no longer available, and that (having viewed the type), *carteri* might not be adult. Mathews (1912b) provided illustrations and a discussion for both *bassi* and *carteri*, while Hartert (1926) discussed *carteri* and remarked that it had not been recognised as a juvenile when described. However, Mathews (1912b) had tentatively reached that conclusion in his discussion.

Like many of the early taxonomic descriptions for albatross taxa, this brief summary illustrates the principal factors which bedevil the acceptable naming of some taxa today – namely the absence of a type specimen (*chlororhynchos*); type localities which are not breeding sites, and a past lack of knowledge of plumage variation according to age.

Brooke *et al.* (1980) set out to clarify the problem of origin and naming for Yellow-nosed Albatrosses, based principally on the

plumage of various specimens. The tonal differences caused by age and feather wear can create confusion as they correctly reported. Among small albatrosses (mollymawks) the principal defining factor for determination of taxa is the configuration of the bill plates, especially at the proximal (skull) end. All fledged juveniles show the shape and skin relationships at the proximal end of the culmen plate which is retained throughout life, irrespective of changes in bill colouration as they age. Good published examples of such shape differences between taxa can be found in Murphy (1936, p. 493) and Serventy *et al.* (1971, p. 69).

Brooke *et al.* (1980) notes that ‘. . . the shape of the yellow stripe on the culmen also varies geographically. In the Indian Ocean . . . the yellow stripe is pointed whereas in the Atlantic Ocean it is rounded’. They illustrate this with two black and white photos from breeding localities. Tickell (2000, plates 6 & 7) gives colour illustrations which demonstrate the same features. However, these authors concentrate on the shape of the yellow stripe at the proximal end of the culmen, which is a feature found only in adult or close to adult birds. This colour feature is of no use in juvenile birds. Further, the illustrations in Brooke *et al.* (1980) and Tickell (2000) do not show that the proximal end of the culmen of both taxa is yellow with a variable proximal margin of black. Murphy (1936, p. 493) illustrates for a *chlororhynchos* specimen (AMNH 132536) that the culmen plate widens above the nostrils and that there is a black proximal margin round the yellow.

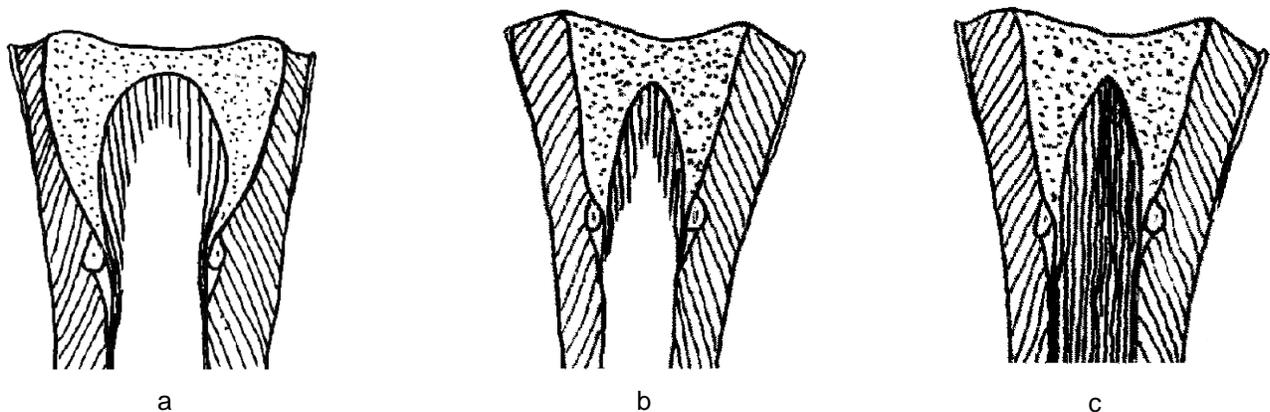


Fig. 1. Sketch drawings of the dorsal proximal end of the bills of Yellow-nosed (mollymawks) Albatrosses:
a. *Thalassarche chlororhynchos* (AMNH 132936).
b. *Thalassarche bassi* (Type AMNH 527047).
c. *Thalassarche carteri* (Type AMNH 527048).

Brooke *et al.* (1980) note that *carteri* is based on an immature specimen – white headed and with a purely black bill (AMNH 527048) and ‘. . . lacking the subspecific characters only patent in adults must be regarded as subspecifically indeterminate’. It is not clear from their text whether they viewed the types of *carteri*, or *bassi* (AMNH 527047), but I suspect not, as they refer to Mr John Farrand (*in litt.*) for a plumage description of the *bassi* specimen. Having rejected *carteri* on the basis of its immature state, they took into use *Diomedea chlororhynchos bassi* as the name for birds breeding in the Indian Ocean.

I viewed the type specimens of both *bassi* and *carteri* at the American Museum of Natural History, New York on 1 September 1982 and again in January 1988. I noted that both have a narrow non-thickened proximal end to the culmen plate above the nostrils, and that both had white heads, with a small black eyebrow for the *bassi*, and only a trace of black in front of the eye for the juvenile *carteri*.

The definitive difference in the proximal end of the culmen between *chlororhynchos* and *bassi/carteri* is the broadening of the plate above the nostrils in *chlororhynchos*. The shape of the proximal end of the adult yellow culmen stripe is not always consistently rounded in *chlororhynchos* and pointed in *bassi/carteri*, as I have seen two specimens in museums at Durban, South Africa and Edinburgh, Scotland (collected from breeding sites at Gough and Tristan Islands), where the yellow stripe proximal end is pointed rather than rounded. However, in both of these cases the culmen plate broadens above the nostrils.

My sketches in Figure 1 illustrate the differences at the proximal end of the culmen plate between *chlororhynchos*, *bassi* and *carteri*. Marchant & Higgins (1990) comprehensively present the situation illustrated as follows: ‘. . . Culminicorn of Indian Ocean birds tapers behind nares, and pointed at base; naricorn has straight sides. In S. Atlantic birds, culminicorn broadens behind nares, and has rounded base; naricorn has convex sides’.

So, what should the Indian Ocean taxon of the Yellow-nosed Albatross be called? Both type specimens are male and with the exception of the tail are almost identical in size (*bassi/carteri* length culmen plate 112 mm/110 mm; length culmen plate plus skin to feathers at base of bill 114/114; wing 470/465; tail 185/163; and tarsus 78/75). Given the explanations above regarding my inspections of the type specimens, both belong to the same taxon.

Nunn *et al.* (1996) re-established *Thalassarche* for the small albatrosses (mollymawks) in the southern hemisphere and this seems to have been widely accepted. Robertson & Nunn (1998) reviewed the taxonomy of albatrosses and made suggestions towards a discussion on taxa already morphologically distinguishable, with the assistance of DNA as an additional tool. Based on the determinations listed above, the scientific name used for the Yellow-nosed Albatrosses breeding in the Indian Ocean was *carteri*, which followed Turbott (1990).

Thus, *Thalassarche* (*Thalassogeron*) *carteri* Rothschild, 1903 according to the rules of nomenclature takes precedence by prior

determination over the synonym *Thalassarche* (*Diomedea*) *bassi* Mathews, 1912.

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