

**Article XXXV.—A NEW ALBATROSS FROM THE WEST COAST
OF SOUTH AMERICA.**

CONTRIBUTIONS FROM THE BREWSTER-SANFORD COLLECTION.¹

BY ROBERT CUSHMAN MURPHY.

Mr. John T. Nichols, of the American Museum of Natural History, has kindly brought to my attention an apparently undescribed albatross in the Brewster-Sanford Collection. The type and only specimen was collected about forty miles off the coast of Chile, by Mr. Rollo H. Beck, who informs me that he did not, at the time of the capture, distinguish the bird from an example of *Diomedea exulans* taken with it.

In size the new species belongs with the group of major albatrosses, but the absolute lack of vermiculations on the extensive white areas of its plumage distinguishes it sharply from *Diomedea exulans* or its allies, and, indeed, from all of the larger albatrosses excepting possibly *Diomedea epomophora*. Furthermore, the formation of the narial tubes and apertures differs sufficiently from that in any known albatross to warrant, in my opinion, the erection of a new subgenus of *Diomedea*.

Rhothonia² subgen. nov.

Naricorn rotund and bulging, the tubes much more prominent than in subgenus *Diomedea*; nostrils circular in outline, and directed forward instead of obliquely upward; culminicorn obtusely pointed posteriorly.

Diomedea (Rhothonia) sanfordi³ sp. nov.

Char. sp.—Bill shorter and narrower than in the *D. exulans* group, with a less strongly hooked unguis; no trace of bars or vermiculations on any part of plumage, which is whiter than that of other members of the genus.

¹ This is the first of a series of papers on the collection of marine birds which Mr. Rollo H. Beck has secured for Mr. Frederick F. Brewster and Dr. L. C. Sanford, chiefly off the coasts of southern South America. The collection is deposited in the American Museum where, through the generosity of its owners, it forms a part of the material available for research. Mr. Robert Cushman Murphy, Curator of the Department of Natural Science, of the Brooklyn Museum, whose explorations in the subantarctic have given him an opportunity to meet in life many of the birds secured by Mr. Beck, has been requested to prepare the reports on the Brewster-Sanford Collection.—FRANK M. CHAPMAN, Curator of Birds, American Museum of Natural History.

² 'ράθωνες, the nostrils.

³ I take pleasure in naming this handsome bird in honor of Dr. Leonard C. Sanford, whose ornithological enthusiasm has led to the assembling of an unique collection of South American water birds.

Type.— No. 1418, Brewster-Sanford Coll., ♀ adult; Oct. 22, 1913; at sea, 40 miles off Corral, Chile; R. H. Beck.

Range.— Known only from the type locality.

Description of Type.— Head, back, tail, entire under surface, and flanks, white without a trace of wavy bars; a few feathers with dusky shafts and terminal blotches on interscapulum and lower flanks, and a few irregular brownish spots near tip of tail; scapulars grayish-brown, narrowly edged with whitish; wings blackish-brown, blending into clove-brown toward the anterior border; base of primaries white,

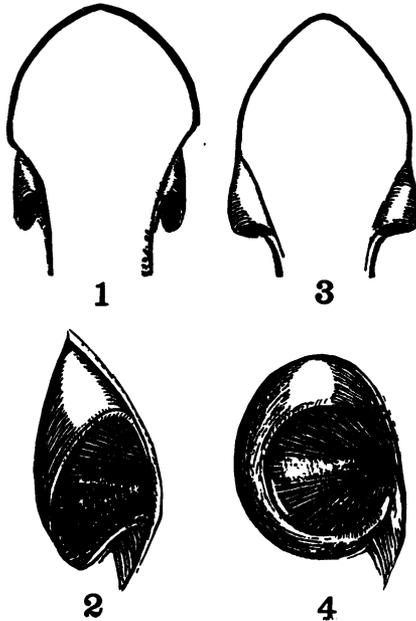


Fig. 1. Superior view of culminicorn and narial tubes of *Diomedea exulans*. 2. Anterior view of right narial tube of *D. exulans*. 3, 4. The same structures and aspects in *D. sanfordi*.

especially on the inner webs, the shafts of the outer quills cream-colored except at their tips; lining of wing white with a dark margin; "iris brown; bill fleshy white, tip creamy; feet grayish white; ovaries minute, non-breeding" (R. H. B.). Measurements in millimeters; wing, 612; tail, 185, tarsus, 115; middle toe and claw, 152; exposed culmen, 150.

Remarks.— Since the type specimen of *D. sanfordi* is very evidently an old female in unworn plumage, I have compared it with an equally mature female of *D. exulans*, taken at the same locality and on the same date. My experience with the latter species on its breeding grounds at South

Georgia has shown that there are marked sexual distinctions among fully adult birds, the males being larger in most dimensions as well as more nearly immaculate in coloration.

Comparative measurements.

	Exposed culmen	Breadth of culmicorn between nostrils	Greatest width of unguicorn	Width of maxilla at gape
<i>D. sanfordi</i> ♀ ad. Brewster-Sanford Coll. 1418.	150	15.5	14	40
<i>D. exulans</i> ♀ ad. Brewster-Sanford Coll. 1417.	158	19.5	16.4	43.5

	Wing (from carpal joint)	Length of ulna (mid-wing)	Tail	Tarsus	Middle toe and claw
<i>D. sanfordi</i> ♀ ad. Brewster-Sanford Coll. 1418.	612	410	185	115	152
<i>D. exulans</i> ♀ ad. Brewster-Sanford Coll. 1417.	577	427	188	112.5	162

The figures in the first four columns demonstrate that *sanfordi* has a distinctly weaker bill than *exulans*. The diagnostic characters of the narial tubes are illustrated by the accompanying sketch. To this I may add that in *sanfordi* the lumen of the tube runs straight backward so that it may be followed with the eye for a considerable distance when viewed from directly in front. In *exulans*, on the other hand, the course of the tunnel is sharply toward the mid-line, so that only the lateral wall is visible from the front.

The usual wing dimensions, if considered alone, would be somewhat misleading, for the wing (manus) of *sanfordi*, with fresh, unworn remiges, is actually longer than that of a wandering albatross in practically the same condition of plumage. Comparative measurements of the mesial segment (ulna) give a truer conception of the probable relation in size of the two

species, for *exulans* is doubtless a larger bird than *sanfordi*, with a wider expanse (tip to tip), and greater weight of body. It is interesting in this connection to note that in the folded wing of *exulans* the tips of the primaries fall short of the tips of the secondaries, while in *sanfordi* the primaries extend beyond the secondaries.

The type of *sanfordi* shows no trace of the white olecronal patch which is so conspicuous a mark on the wing of *exulans* and its allies.

As regards coloration, it is at least highly improbable that the plumage of this very white albatross is marked with undulating bars at any age.