BEAUFORTIA

SERIES OF MISCELLANEOUS PUBLICATIONS

INSTITUTE OF TAXONOMIC ZOOLOGY (ZOOLOGICAL MUSEUM) UNIVERSITY OF AMSTERDAM

No. 244 Volume 19 May 28, 1971

On the taxonomic status of *Delphinus pernettensis* de Blainville, 1817
(Notes on Cetacea, Delphinoidea II)

P. J. H. VAN BREE

ABSTRACT

According to the author insufficient proofs exist to consider Stenella plagiodon (Cope, 1866) a junior synonym of Delphinus pernettensis de Blainville, 1817 or of Delphinus pernettyi Desmarest, 1820. To avoid further confusion the International Commission on Zoological Nomenclature is requested to use their plenary powers to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the following specific names: a. pernettensis de Blainville, 1817, as published in the combination Delphinus pernettensis; b. pernettyi Desmarest, 1820, as published in the combination Delphinus pernettyi.

In 1817, H. M. Ducrotay de Blainville described in the Nouvelle Dictionnaire d'Histoire Naturelle, edited by A. G. Desmarest, volume IX (:154), the dolphin species *Delphinus pernettensis* as follows:

"[Sous-genre — Delphinorhynchus] Quatrième Espèce — Dauphin de Pernetty (Delphinus Pernettensis, Blainville). Cette espèce, qui appartient peut-être au sous-genre suivant [Delphinus], a été décrite et figurée par Pernetty, Voyage aux îles Malouines, p. 99, tab. II, fig. 1. L'animal pesoit cent livres, ce qui indique une très-petite taille pour un cétacé; sa tête étoit terminée antérieurement par un bourrelet se prolongeant presque en bec d'oiseau et revêtu d'une peau épaisse et grise. Ce bec étoit armé de dents aiguës, blanches et de la forme de celle du brochet; la mâchoire inférieure parroisoit sensiblement plus longue que la supérieure; le dos étoit noirâtre et le ventre d'un gris de perle, un peu jaunâtre, moucheté de taches noires, et d'autres gris de fer. Les nageoires pectorales, attachées très-bas, étoient arquées; la dorsale aussi arquée, étoit grande et placée assez près de la queue."

In another publication, two years later, Desmarest (1820:513) changed the

Received: January 11, 1971

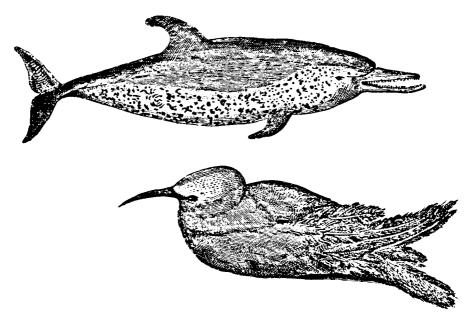


Fig. 1. Delphinus pernettensis and a seabird, probably a Noddy (Anous stolidus); after Perne(t)ty 1769 & 1770, pl. II.

name and called the species *Delphinus Pernettyi*. He did not indicate clearly he considered his spelling the right one, so in fact "pernettyi" is an incorrect subsequent spelling and therefore nomenclatorially non-existent. But even if we accept that Desmarest intended to correct the name, then it is an unjustified emendation and that thereby the name pernettyi has become a junior objective synonym of pernettensis.

The above-cited diagnosis is very nondescript and can be applied to a number of species of dolphin. Already in 1827 (: 406), Lesson wrote about the species: "Cette espèce est douteuse et ne repose que sur une description imparfaite de Pernetty". The species therefore, when cited, was placed *incertae sedis* and its description mostly ignored or forgotten (nomen dubium).

True, in 1884, while describing a dolphin caught off Pensacola, which he thought to be identical with *Prodelphinus* (= Stenella) doris (Gray, 1846) but which turned out to be a specimen *Delphinus plagiodon* Cope, 1866 (now Stenella plagiodon), compared his animal with the description of *Delphinus pernettensis*. He came to the conclusion (: 322): "If our Pensacola specimen is to be accredited to any species known only by the exterior, I believe it should be to this *D. Pernetyi*. As no portions of the animal were preserved, however, and no diagnosis or measurements were given, I think it undesirable to withdraw the species in question from the list of espèces douteuses."

In later publications True does not refer again to the Dauphin de Pernetty,

not even in his important revision of the Delphinidae (1889). Fraser in 1950, however, again referred to the diagnosis of *Delphinus pernettensis* in his study on *Stenella frontalis*. He also compares *D. pernettensis* with *Stenella plagiodon* and he says (: 64): "On the whole it seems likely that, as True (1884: 322) indicated, Pernetty's dolphin has its affinities with the specimen which True finally identified as belonging to *S. plagiodon*."

Fraser probably came to this carefully worded conclusion, because while reading the journal by Pernety (1769), he finds that the dolphin mentioned by the traveller is sighted first (: 77) near the Cape Verde Islands at 6°43′ N, 25°17′ W and caught (: 122) in the neighbourhood of the Abrolhos Archipelago at 16°44′ S, 35°10′ W (near the coast of Brazil). It must be noted that the positions mentioned are recorded in the old French way (cf. Meridian of Paris). As far as is now known, Stenella plagiodon inhabits subtropical and tropical waters at the Atlantic side of North and Central America, and its discovery in tropical waters near South-America would not come as a surprise. Therefore it cannot be excluded that a dolphin with a spotted pattern, caught near the Abrolhos Archipelago, could be a Stenella plagiodon and if so, this name could be a junior synonym of Delphinus pernettensis.

The academic conclusion of Fraser, however, has been interpreted in the wrong way by Hershkovitz (1966: 41). This author (after Fraser) in his checklist of recent Cetacea considers *Stenella plagiodon* without any doubt to be a junior synonym of *Delphinus pernettensis* and he adopts the position near the Abrolhos Archipelago (see above) as the type locality of the species.

The present author after studying the diagnosis by de Blainville (1817) and the notes by Fraser (1950) was struck by the difference between the pages of the book by Pernetty cited by both scientists. After investigation, it turned out that two editions exist of the "Voyage aux îles Malouines". The first one, published in Berlin (Etienne de Bourdeaux) in 1769 and in which the author is called Pernety (see latin name used by True, 1884), is very rare and only a few copies still exist. The second edition (nouvelle édition) was published in 1770 in Paris (Saillant & Nyon-Delalain) and is more common.

Checking both editions with reference to the description of the dolphin I found that Fraser was right in that in the 1769 edition the dolphins were first sighted near the Cape Verde Islands (: 77) and that a specimen was caught near the Abrolhos Archipelago (: 122). In the second edition, however, on page 99 (and following ones) the author describes that the dolphins were seen and a specimen was caught between the islands Boa Vista and Maio of the Cape Verde Islands. Near the Abrolhos Archipelago (: 131) only a seabird, probably a Noddy (*Anous stolidus*), was caught (see the figure of the dolphin and the bird reproduced herewith; these figures are the same in both editions).

As de Blainville (1817: 154) refers to page 99 of the book by Pernetty it is clear that he had in hands the "nouvelle édition" and that according to him therefore, the type locality of the dolphin species of which he gives the diagnosis, is near the Cape Verde Islands and *not* in the neighbourhood of the Abrolhos Archipelago. As up to the present no specimen of *Stenella pla-*

gicdon has been caught near the African coast*), is is therefore very unlikely that *Delphinus pernettensis* and *Stenella plagiodon* are synonyms for the same species.

As previously stated, the description of *Delphinus pernettensis* is very nondescript and can be applied to several species. For instance, see the description and photograph of a specimen of *Stenella*, named provisionally *Stenella punctata* (Gray, 1846), caught near the Cape Verde Islands in 1951 (Cadenat, 1956: 91; 1959: pl. 18). As nothing of the Pernetty's dolphin has been preserved and we are therefore not able to check further identifications, for the sake of stability in nomenclature it would be unwise to attach value to the diagnosis and name of *Delphinus pernettensis*. The taxonomy of Cetacea is already too complicated to waste time on intellectual games, speculating on which dolphin species could be *Delphinus pernettensis*. The author therefore requests the International Commission on Zoological Nomenclature to use their plenary powers to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the following specific names:

- a. pernettensis de Blainville, 1817, as published in the combination Delphinus pernettensis;
- b. pernettyi Desmarest, 1820, as published in the combination Delphinus pernettyi.

At the end of this short article I want to thank most sincerely Madame Dr M. C. Saint Girons (Paris) and Dr P. E. Purves (London) for their help in checking old publications and for the correction of the English. I am also grateful to Dr L. B. Holthuis (Leiden) for his advice concerning zoological nomenclature.

REFERENCES

CADENAT, J.

1956 A propos de Cachalot. — Notes africaines (I.F.A.N.), 71: 82—92.

1959 Rapport sur les petits Cétacés ouest-africains. — Bull. I.F.A.N., 21 (A): 1367—1409, 31 pls.

CADENAT, J. & A. LASSARAT

1959 Notes sur les Delphinidés ouest-africains IV: Notes sur un Prodelphinus indéterminé de Côte d'Ivoire. — Bull. I.F.A.N., 21 (A): 777—781, 5 pls.

[Desmarest, A. G. ed.]

1817 Nouveau dictionnaire d'histoire naturelle, etc. 9: 1 + 1-624, 6 pls (Déterville, Paris).

DESMAREST, A. G.

1820 Mammalogie ou description des espèces de mammifères : i—viii, 1—555 + 1, 112 + 14 + 12 pls (Agasse, Paris).

*) A study of the skull of a dolphin caught off Abidjan (Ivory Coast), which according to Cadenat & Lassarat (1959) might be a Stenella plagiodon, revealed that it does not belong to that species but to Stenella frontalis (G. Cuvier, 1829).

FRASER, F. C.

1950 Description of a dolphin Stenella frontalis (Cuvier) from the coast of French Equatorial Africa. — Atlantide Rep., 1: 61—84, 4 pls.

HERSHKOVITZ, Ph.

1966 Catalog of living whales. — Bull. U.S. nation. Mus., 246: 1—VIII, 1—259.

LESSON, R. P.

1827 Manuel de mammalogie, ou histoire naturelle des mammifères : i—xv, 1—441 + 1 (Roret, Paris).

PERNETY, [A. J.]

1769 Journal historique d'un Voyage fait aux Iles Malouïnes en 1763 & 1764, etc.: I—XVI, 3—403, 404—704 + 47, 16 pls (Etienne de Bourdeaux, Berlin).

PERNETTY, [A. J.]

1770 Histoire d'un voyage aux Isles Malouines fait en 1763 & 1764, etc.: Nouv. éd.: 1—385, 1—334 + 2, 16 pls (Saillant & Nyon-Delalain, Paris).

TRUE, F. W.

1884 On a spotted dolphin apparently identical with Prodelphinus doris of Gray.

— Smiths. rep. for 1884 (2): 317—324, 6 pls.

1889 Contributions to the natural history of the cetaceans: A review of the family Delphinidae. — Bull. U.S. nation. Mus., 36: 1—191, 47 pls.

Drs. P. J. H. VAN BREE
Institute of Taxonomic Zoology (Zoological Museum)
University of Amsterdam
Plantage Middenlaan 53
Amsterdam 1004 — The Netherlands