

# A new genus for the Kerguelen Petrel

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The Kerguelen Petrel (*Pterodroma brevirostris* auct.) is an inhabitant of stormy southern seas, breeding at the islands of Kerguelen, Crozet, Marion, Tristan da Cunha, and Gough. Like the bird itself, its specific and generic nomenclature has been through some rough weather. The Kerguelen Petrel was long placed among the gadfly petrels of the genus *Pterodroma* (formerly *Aestrelata* or *Oestrelata*). Imber (1985) used characters of the upper intestine, supplemented with data from Mallophaga and behavioural traits, to show that the Kerguelen Petrel was not closely related to *Pterodroma*. He resurrected Mathews' (1942) name *Lugensa* for it and placed it among the fulmarine petrels, a treatment that has had influential followers (e.g. Sibley & Monroe 1990).

Imber's observations were preceded by those of Harper (1973) who noted major differences between skulls of the Kerguelen Petrel and *Pterodroma mollis*, which, along with *P. inexpectata* and *P. ultima*, had been thought to be a close ally (Jouanin & Mouglin, 1979). My own examination of skeletons of the Kerguelen Petrel showed this species to be very different from all available taxa of *Pterodroma*, and more similar to fulmarines in certain characters, such as in the configuration of the distal end of the humerus. On the basis of mitochondrial DNA sequences, Nunn (1994) reported the Kerguelen Petrel to be a fulmarine and not part of the genus *Pterodroma*. He referred it to the genus *Lugensa*. In a subsequent phylogeny based on the same kinds of data (Nunn & Stanley 1998), *Lugensa* was still separated from *Pterodroma* but was placed nearer the shearwaters (*Puffinus* and *Calonectris*). In any case, the consensus is that the Kerguelen Petrel is a distinct generic entity that is not particularly closely related to *Pterodroma*.

The specific name used for the Kerguelen Petrel was long the subject of contention, particularly as concerns the epithet *Procellaria lugens* attributed to Kuhl (1820). The issue is complex and the details unimportant to the basic theme of this note and so are best summarized. Kuhl (1820: 144) made reference to a specimen from the Atlantic Ocean once in the possession of J. R. Forster, to another specimen of a smallish petrel in his possession since lost, and to what he referred to as *Procellaria lugens* Banks (and on page 145 as *Proc. lugens* Forst.) based on two drawings by Sidney Parkinson from James Cook's first expedition. All of these he listed erroneously under the name "*Proc. grisea* L.", which we now know to refer to the Sooty Shearwater *Puffinus griseus* (Gmelin). Thus, although the name *P. lugens* first saw publication in Kuhl, it was simply proposed as a synonym.

Bourne & Elliott (1965) determined that the Parkinson drawings were of the species now known as *Pterodroma inexpectata* Forster (1844). They also considered that Kuhl's description of the specimen now lost could not be identified, from which they concluded that the name *lugens* should "perhaps best be written off as indeterminable". Since then it has been consigned to oblivion. I cannot see in any

case that the name *lugens* can be attached to the specimen that Kuhl was attempting to describe. Thus *P. lugens* must either be regarded as a synonym of *Procellaria grisea* Gmelin or as an earlier name for *P. inexpectata* Forster (1844). Regardless, the name *lugens*, expunged by Bourne & Elliot (1965), cannot pertain to the Kerguelen Petrel. This conclusion has major consequences for the generic name *Lugensa*.

The entire text for Mathews' (1942) new subgenus *Lugensa* is as follows:

*The Short-billed Petrel, formerly called Pterodroma brevirostris, now known as P. lugens of Kuhl 1820, has the bill very much compressed on the sides. That character is shared by no other species of Pterodromine Petrel and it can be made a diagnostic character for a new subgenus Lugensa and be known as Pterodroma (Lugensa) lugens (Kuhl 1820). As far as Mathews was concerned, there was only a single species in his new subgenus, that being Procellaria lugens Kuhl (1820), which must, therefore, be the type of the genus. It is quite irrelevant that Mathews "also mentioned the alternative name P. brevirostris" (Imber 1985: 215), because he regarded that name to be a junior synonym of lugens. Shortly thereafter, Mathews came to regard P. brevirostris as an earlier name for the Mascarene species P. aterrima Bonaparte and affirmed that his Lugensa had as "orthotype Procellaria [sic] lugens Kuhl 1820" (Mathews & Hallstrom 1943: 8).*

It can only follow that if the specific name *lugens* Kuhl cannot be identified with the Kerguelen Petrel, as concluded by Bourne & Elliott (1965), then the generic name *Lugensa* automatically follows it onto the rubbish heap of nomenclature. The only alternative would be to attach the name *lugens* to the species now known as *Pterodroma inexpectata*, in which case *Lugensa* would become a synonym of *Pterodroma*. Because either action leaves the Kerguelen Petrel without a generic name, I propose the following.

### ***Aphrodroma*, new genus**

*Type-species. Oestrelata kidderi* Coues (1875a,b). The holotype of this species (USNM 68970) is an undisputed example of Kerguelen Petrel, an adult male taken on 22 Oct 1874 on Kerguelen Island by J. H. Kidder (Deignan 1961: 12). The selection of *O. kidderi* as the type species of *Aphrodroma* insures that the generic name will always attach to the organism intended to be distinguished. The putative holotype of *Procellaria brevirostris* Lesson (1831) is a "battered" (Bourne 1957: 185, footnote) specimen in the Paris Museum collected by Delalande in 1820, supposedly at the Cape of Good Hope (Mathews & Hallstrom 1943). Brooke (1981) found "no reason to doubt the provenance of the type specimen", although the species is only a rare vagrant in South African waters (Maclean 1985). Doubts have been expressed both that this is the type of Lesson's name (there being discrepancies between it and Lesson's description—see Elliott 1957: 565) and that the specimen is correctly identified as a Kerguelen Petrel. Current usage follows the assessments of Bourne & Elliott (1965), aided by C. Jouanin (in Elliott 1957, and Bourne & Elliott 1965), that this is Lesson's type and that it is a Kerguelen Petrel. If so, then the species may now

be known as *Aphrodroma brevirostris* (Lesson). Should the identity of the Paris specimen, or its status as a type, be revised, the genus would remain the same and the Kerguelen Petrel would then be known as *Aphrodroma kidderi* (Coues).

*Etymology.* Gr. *aphros*, foam, froth, and *dromos*, running, from the habitat of the species in stormy seas. The name is feminine in gender.

*Diagnosis.* See the diagnosis of Imber (1985: 215) for his *Lugensa*, to which may be added the cranial characters mentioned by Harper (1973).

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