# The feather louse *Halipeurus gravis gravis*, Timmermann, 1961 (Mallophaga: Philopteridae) from a Sooty Shearwater *Puffinus griseus* in Scotland.

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Sooty Shearwaters *Puffinus griseus* (Gmelin, 1789) are regular migrants to British seas, arriving in late July and departing by late October. Outside of this period they are uncommon, presumably having returned to their breeding colonies in the southern hemisphere. A freshly dead Sooty Shearwater found at Elliot, near Arbroath, Scotland on 7 February 1987 was therefore of considerable interest being in the wrong hemisphere in the wrong season. The bird was prepared as a cabinet skin for Montrose Museum, Angus, Scotland.

Feather lice (Mallophaga) were removed from the plumage and were identified by R. L. Palma (National Museum of New Zealand).

Four species of feather lice were present, three of which are previously known from Sooty Shearwaters, and a variety of other shearwater species, (Pilgrim & Palma 1982). The lice are *Trabeculus hexakon* (Waterston, 1914), *Austromenopon paululum* (Kellogg & Chapman, 1899) and *Halipeurus diversus* (Kellogg, 1896). The fourth species present was the subspecies *Halipeurus gravis gravis* Timmermann, 1961, whose only known host is the Great Shearwater *Puffinus gravis* (O'Reilly, 1818). One male and one female of this louse were found on the Sooty Shearwater. The *Halipeurus* louse, normally found on Sooty Shearwaters, *H. diversus*, was present in good numbers and various instars. The occurrence of *H. g. gravis* must, in such circumstances, be regarded as a straggler to the host species.

How the lice were transferred from one shearwater species to another remains uncertain but human interference can be ruled out. Both shearwaters may come into contact briefly at sea, perhaps while engaged in feeding on a common food source. Transfer of lice, which must be by physical contact, under such circumstances would have to be rapid and would be extremely hazardous for the insects. Transfer is more likely at a breeding colony, where casual contact would be frequent both above and below ground for fledglings and adults respectively, particularly where burrow density is high. Away from the vast numbers on the Tristan da Cunha Islands (where Sooty Shearwaters are not known to breed), the only other place where Great Shearwaters have been found breeding is in the Falkland Islands, at Kidney Island and Sea Lion Island (Woods, 1982). At Kidney Island there is also a large colony of Sooty Shearwaters, the only place where both species are known to breed sympatrically. It seems likely that the Sooty Shearwater washed up dead on the east coast of Scotland may have originated from Kidney Island, or that general area of the Falklands. Well over 100 Sooty Shearwaters from the New Zealand islands have been systematically deloused and none was parasitised by *H. g. gravis* (R. L. Palma pers. comm.)

A large scale programme of ringing and wing-tagging of Sooty Shearwaters in the Falkland Islands might reveal the truth of the origins of this species in British seas, and confirm the circumstantial evidence here presented.

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