

Short communication

Status of three Octopoda recorded from New Zealand, based on beaks recovered from long-distance foraging marine predators

STEVE O'SHEA

National Institute of Water and Atmospheric  
Research  
P.O. Box 14-901 Kilbirnie  
Wellington, New Zealand

**Abstract** An uncritical compilation of New Zealand Mollusca by Spencer & Willan in 1996 cites 90 species of cephalopod as recorded from New Zealand waters (excluding the Kermadec Islands) to 31 December 1993. Seventeen of these 90 species are octopods and the status of five is in need of immediate revision. *Pareledone* sp. and *Octopus* sp. have since been transferred to the genera *Graneledone* and *Benthoctopus*, respectively, although both species await description. *Haliphron atlanticus* Steenstrup, 1860 (as *Alloposus mollis* Verrill, 1880), *Ocythoe tuberculata* Rafinesque, 1814, and *Octopus dofleini* (Wülker, 1910) are cited as occurring within New Zealand waters solely on the basis of identification of beaks or tissue remains from gut contents of long-distance foraging marine predators. The appropriateness of including these three species in the New Zealand fauna is evaluated in the light of thorough examination of extensive cephalopod collections from New Zealand waters.

**Keywords** beaks; marine predators, *Haliphron*; *Ocythoe*; *Octopus*; Cephalopoda; Octopoda; New Zealand

**HALIPHRON ATLANTICUS**

The two purported New Zealand records of *Haliphron atlanticus* (as *Alloposus mollis*) are from the Tasman Sea (Clarke & MacLeod 1982) and the Antipodes Islands (Imber 1992). The Tasman Sea record is based on beaks recovered from sperm

whales at two factory-ship locations, both considerably outside the New Zealand Exclusive Economic Zone. The location of whale capture is described as "probably" within 100 miles of the factory-ship locations. However, for *Haliphron* to have been collected in New Zealand waters the whaling vessels had to have been well in excess of this reported distance. The Antipodes Islands record is based on beaks recovered from gut contents of the wandering albatross *Diomedea exulans*, a species known to average in excess of 1200 km from the nest site in search of prey (Jouventin & Weimerskirch 1990). The concurrent recovery of beaks of *Sepia* (cuttlefish), a genus which does not occur in New Zealand waters (Dell 1952; pers. obs.), indicates that this prey was most likely taken in Australian waters. Although the recognised distribution of *Haliphron* is cosmopolitan throughout tropical and subtropical waters (Thore 1949), neither Clarke & MacLeod (1982) nor Imber (1992) (*vide* Jouventin & Weimerskirch 1990) offer conclusive proof that *Haliphron* occurs in New Zealand waters. From a biogeographic perspective this species must be excluded from the New Zealand fauna.

**OCTOPUS DOFLEINI**

Beaks attributed to this species (Imber 1992) are misidentified beaks of a similar large-bodied New Zealand species, *O. zealandicus* (Benham, 1944). *O. dofleini* should not be included in the New Zealand fauna.

**OCYTHOE TUBERCULATA**

Cited records are based on beak and tissue remains recovered from gut contents of wandering albatross (Imber & Russ 1975; Imber 1992), Buller's mollymawk *Diomedea bulleri* (West & Imber 1986), and black petrel *Procellaria parkinsoni* (Imber 1976). *Ocythoe* has been described from Australia (Roper & Sweeney 1976), and the extensive foraging

