

## **Mesoplodon layardii (Gray, 1865)**

English: Layard's beaked whale, Strap-toothed whale

German: Layard-Zweizahnwal

Spanish: Zifio de Layard, ballena picuda de Layard

French: Mésoplodon de Layard, baleine à bec de Layard

Family Ziphiidae

### **1. Description**

*M. layardii* has a very distinctive black and white pattern (Pitman, 2009): adults are mainly black with patches of grey and white that largely occur in the genital area, around the front of the upper jaw, the lower jaw, throat and chest. There is a grey blaze from the melon to almost two-thirds of the way to the dorsal fin. The long tusks emerge in males in the middle of the lower jaw and curve over the upper jaw, preventing it from opening fully. This bizarre dentition does not, however, seem to interfere with (feeding) and prey size (see below). Body size reaches 6.2 m and body mass up to 1,300 kg (Jefferson et al. 2008). It is possible that *M. layardii* could be confused with the spade-toothed beaked whale *M. traversii*, due to their very similar dentition (Van Waerebeek *et al.*, 2004).

### **2. Distribution**

<http://www.iucnredlist.org/apps/redlist/details/13249/0/rangemap>

*Distribution of Mesoplodon layardii (Taylor et al. 2008; © IUCN). The species is circumglobal in temperate and sub-Antarctic southern waters (Pitman, 2002).*

Layard's beaked whale occurs throughout the Southern Ocean; it has been recorded from Tierra del Fuego and Chubut in Argentina, Uruguay, the Falkland Islands/Islas Malvinas, Namibia, Cape Province, Iles Kerguelen, Western Australia, South Australia, Victoria, New South Wales, Queensland, Tasmania, New Zealand, and Isla Navarino and the Estrecho de Magallanes in Chile (Rice, 1998). In recent years, several sightings have been reported from Antarctic waters, as well as strandings from Macquarie Island and Heard Island (Van Waerebeek *et al.*, 2004).

The northernmost records of Layard's beaked whale stem from strandings along the southern Brazilian coast (31-32°S; Pinedo et al. 2002).

### **3. Population size**

According to Pitman (2002, 2009) it is one of the more widespread and common beaked whales in the Southern ocean, however some sightings of *M. traversii* may have been equivocally attributed to *M. layardii* .

#### 4. Biology and Behaviour

**Behaviour:** One of the largest of the beaked whales, the strap-toothed whale is also one of the few *Mesoplodon* species that can be readily identified at sea. It may bask at the surface on calm, sunny days. Generally the animals are hard to approach, especially in large vessels. Their flukes do not normally show above the surface at the start of a dive. Limited observations suggest that strap-toothed whales sink slowly beneath the surface, barely creating a ripple, then rise and blow again 150-200 m away. Typical dive time is 10 to 15 minutes (Carwardine, 1995).

**Food:** The food habits of strap-toothed whales were examined in detail by Sekiguchi et al. (1996) using stomach contents from 14 whales found stranded on South African and New Zealand coasts. Although a few unidentified fish otoliths and crustacean remains were found in two of these stomachs, 24 species of oceanic squids (some of which occur at great depth) accounted for 94.8% of counted prey items. *Histioteuthis* sp. and *Taonius pavo* were the predominant prey species. The presence of sub-Antarctic squid species suggested a concurrent northward migration to South African waters in late summer/autumn.

Sekiguchi et al. (1996) also compared prey sizes between males with fully grown strap-teeth and females/immature males without erupted teeth. Although females/immature males ate longer squids than males, there was no significant difference in estimated squid weights eaten by both groups. The presence of fully erupted teeth in adult males, therefore, did not seem to influence the size of prey ingested, even though an adult male could only open its jaws about half as wide as a female.

#### 5. Migration

The seasonality of strandings suggests that this species may migrate (Taylor et al. 2008, Pitman, 2009).

#### 6. Threats

No exploitation of this species has been reported (Jefferson et al. 1993; Van Waerebeek *et al.* 2004).

#### 7. Remarks

Range states (Taylor et al. 2008)

Argentina; Australia; Brazil; Chile; Falkland Islands (Malvinas); French Southern Territories (Kerguelen); Heard Island and McDonald Islands; New Zealand; South Africa; Uruguay

IUCN status: "Data Deficient". Not listed by CMS. Listed on CITES Appendix II.

See also recommendations listed in Hucke-Gaete (2000; appendix 1).

#### 8. Sources and further information

see "Genus *Mesoplodon* – Beaked Whales: Introduction and Sources"

© Boris Culik (2010) Odontocetes. The toothed whales: "*Mesoplodon layardii*". UNEP/CMS Secretariat, Bonn, Germany. [http://www.cms.int/reports/small\\_cetaceans/index.htm](http://www.cms.int/reports/small_cetaceans/index.htm)

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