

## **Mesoplodon mirus (True, 1913)**

English: True's beaked whale

German: True-Zweizahnwal

Spanish: Zifio de True, ballena picuda de True

French: Mésoplodon de True, baleine à bec de True

Family Ziphiidae

### **1. Description**

True's beaked whales from the Northern Hemisphere are grey fading to light grey on the undersides. Adults have a dark ring around the eye and some areas of white (Jefferson et al. 2008). Southern Hemisphere adults have an all white tail stock, dorsal fin and flukes (Pitman, 2009). There is little scarring, and observed scars occur in closely spaced parallel lines. The small mandibular teeth are closely spaced almost at the tip of the lower jaw (True, 1913). Adults measure between 4.8 – 5.3 m and reach a body mass of 1400kg (Reidenberg and Laitman, 2009).

### **2. Distribution**

<http://www.iucnredlist.org/apps/redlist/details/13250/0/rangemap>

*Distribution of Mesoplodon mirus (Taylor et al. 2008; © IUCN). This species is found in the warm temperate North and South Atlantic and southern Indian Ocean.*

True's beaked whale is found in the North Atlantic from Nova Scotia and Ireland south to Florida, San Salvador Island in the Bahamas, and Islas Canarias. An often repeated record from the Outer Hebrides (Islands) in Scotland was based on a misidentified *Ziphius cavirostris*. In the Southern Hemisphere it is known from Cape Province in South Africa, Western Australia, and Victoria (Rice, 1998).

True's beaked whales were believed to be found only in the North Atlantic until a specimen was discovered along the Indian Ocean coast of South Africa in 1959. Several other Southern Hemisphere records were noted since then, from South Africa, Australia, and an unconfirmed report from New Zealand. These may represent geographically separate stocks or, alternatively, the range may be more widespread than the few records suggest. Most strandings stem from the western North Atlantic, but a few from the eastern side: mainly from the west coast of Ireland, but also Britain, France, and the Canary Islands. Thus, the species may be associated with the Gulf Stream (Carwardine, 1995; de Buffrénil, 1995a).

The species does not seem to occur within 30° north or south of the equator (antitropical distribution), which may indicate that the northern and the southern populations are reproductively separate, as supported by slight morphological differences (de Buffrénil, 1995a). This suggests subspecific or even specific differentiation, which remains to be confirmed (Jefferson et al. 2008; also see "Genus *Mesoplodon* – Beaked Whales: Introduction and Sources").

### 3. Population size

Since there are only about 20 stranding records worldwide, the species seems to be rather rare (de Buffrénil, 1995a, Taylor et al. 2008), however a mainly offshore habitat and the difficulty to identify *M. mirus* at sea may also be blamed.

### 4. Biology and Behaviour

**Habitat:** Known mainly from stranded specimens, *M. mirus* is probably pelagic, but it can occasionally be seen in coastal waters (Houston, 1990a). Although its preferred habitat is unknown, de Buffrénil (1995a and references therein) suggests that by analogy to other *Mesoplodon* species, it is most likely a pelagic animal. This is supported by the fact that no observations were made close to shore and that stranding events are very rare.

Tove (1995) observed a pod of what he identified as three True's beaked whales 32 nm southeast of Hatteras Inlet, North Carolina and successfully tracked the animals, obtaining photographs that document live coloration and surface swimming habits. The location was in about 600 fathoms (1,100 m) of water, but along a very steep portion of the continental shelf that drops rapidly to just over 1,000 fathoms (1,800 m) before levelling out. Upon discovery, the pod was swimming slowly (ca. 5 km/h) to the SSW, roughly parallel with the fall line of the slope. The location was well within the Gulf Stream, but at an atypically cooler than normal water temperature of 25.4°C. Jefferson *et al.* (2008) cautioned however that these animals were indistinguishable from Gervais' beaked whale.

**Behaviour:** Groups observed at sea have consisted of up to three individuals. They may show their beaks when surfacing. In the Bay of Biscay, energetic breaching behaviour with up to 17 repetitions has been observed (Jefferson et al. 2008).

**Food:** According to Jefferson et al. (1993), stranded animals had squid in their stomachs, but Pitman (2009) suggests that fish may comprise the most important prey items. The species is likely to be a deep diver (Carwardine, 1995).

### 5. Migration

Unknown

### 6. Threats

The species is not known to have been commercially exploited (Houston, 1990a; Jefferson et al. 1993). However, there are reported by-catches. The pelagic drift gillnet fishery off the US east coast recorded 46 beaked whale mortalities between 1989 and 1998, 4 of which were True's beaked whales (Waring, 2001).

### 7. Remarks

Confirmed and inferred **range states** (Taylor et al. 2008) :

Australia; Bahamas; Bermuda; Brazil; Canada; France; Ireland; Madagascar; Morocco; Mozambique; Portugal; South Africa; Spain; United Kingdom; United States of America.

Categorised as "Data Deficient" by the IUCN. Not listed by CMS but listed in Appendix II of CITES.

## **8. Sources and further information**

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

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