



Cover photo: A 334cm male (specimen #3) found floating 27/7/2016, Terceira Island, Azores

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# Stranding of four Sowerby's beaked whales (*Mesoplodon bidens*) in Terceira Island, Azores

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## Abstract

*Sowerby's beaked whales are little known members of the beaked whale family (Ziphiidae). Based on data collected from strandings, this species is found in temperate and subarctic waters in the eastern and western North Atlantic. A very rare stranding record, involving four juvenile animals, found dead in the Azores, is here reported.*

**Keywords:** Ziphiidae, Sowerby's beaked whales, Portugal, Azores, stranding

Since the early 1990's strandings of cetaceans in the Azores have been monitored by the Azores stranding network RACA (Rede de Arrojamentos de Cetáceos dos Açores) in collaboration with the Azores University and the Regional Government. Among the Ziphiidae family, there have been over 30 strandings of four species: a Sowerby's beaked whale (*Mesoplodon bidens*), a Blainville's beaked whale (*Mesoplodon densirostris*), a True's beaked whale (*Mesoplodon mirus*) and a Cuvier's beaked whale (*Ziphius cavirostris*) (RACA unpublished database; first author's stranding database, accessed 31/10/2016).

In this paper we report a stranding of four specimens of *M. bidens*, all along the south and southeast coast of Terceira Island (Figs. 1-2) between 27/7/2016 (specimens #1 to #3) and 1/8/2016 (specimen #4).

**Specimen #1:** This animal was found stranded alive 27/7/2016 (ca. 00:00) on a sandy beach of Angra do Heroísmo bay. It was a juvenile male, 320 cm long, and weighed 590 kg. Death occurred by 02:45 after unsuccessful attempts to get it back to sea.

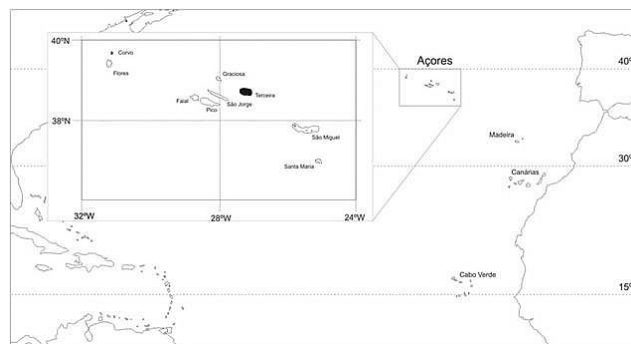


Fig. 1. The Azores and Terceira Island in the NE Atlantic. Map by F. Chauvin

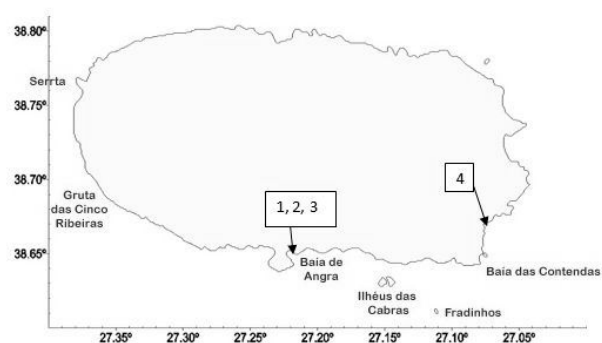


Fig. 2. Location of *Mesoplodon bidens* strandings in Terceira Island on 27/7/2016 (specimens #1, #2 and #3) and 1/8/2016 (specimen #4)



Fig. 3. A 334cm male (specimen #3)

**Specimen #2:** Was found dead 27/7/2016 (ca. 00:00) on a sandy beach on the far west side of Angra do Heroísmo bay. It was a juvenile male, 280 cm long, with a weight 330 kg. **Specimen #3:** (Fig. 3) Was found floating 27/7/2016 (near the harbor of Angra do Heroísmo Nautical Club), west part of the bay by 17:00 and was successfully towed ashore. This animal was a juvenile male, 334 cm long, with an estimated weight 600 kg. Precise biometrics measurements were made on Specimen #3 and a thorough examinations of major internal organs (liver, kidneys, heart, lungs and stomach) was performed revealing no gross pathology nor parasites.

The stomach was empty but sub epidermal fat was 4cm thick indicating a healthy specimen. We think that this specimen died less than 10 hours before prior to its finding.



Fig. 4. A 300cm male (specimen #4)

Specimen #4: (Fig. 4) Was found dead on a small beach on the SE coast of Terceira Island on 1/8/2016. This was a juvenile male, of an estimated length 300 cm. Specimen #4 was only photographed, which occurred after several attempts to reach this stranding site, a portion of beach enclosed by high cliff proved unsuccessful due to strong winds and rough sea conditions. However this specific site is narrow and protected from hydrodynamics and human activity which permitted the recovery of the head.

All three specimens presented with several hematomas and disperse wounds with complete fracture of the anterior part of both maxillae (specimens #1 to #3). These were caused by rocks before the stranding occurred. No signs of human interactions such as nets, bullet holes, nylon/fishing lines, propellers or other were detected. None of the specimens showed any external sign of poor nutrition. The heads of the specimens #1 to #3 were preserved.

*M. bidens* is known mainly from single strandings and several mass strandings, involving usually a mother calf pair. Among mass strandings there is one interesting case, involving whales of similar length as ours: on 15/6/1992 two juvenile males (317cm and 352cm) and a female 298cm long, stranded in Eye, Lewis, Western Isles, Scotland (Sheldrick *et al.*, 1994).

It is a third stranding of *M. bidens* on Terceira Island. There have been two strandings in 2005 and 2009 (JPB unpublished data; RACA unpublished database). This species is known also from strandings in Faial Island,

Pico Island, Santa Maria Island and São Miguel Island (RACA unpublished data; Gonçalves *et al.*, 1996; Pereira *et al.*, 2011). There are many early sightings of the species in the Azores (RACA unpublished database) and it should be noted that the Azores are one of the world's stranding and sighting hot spots for the species.

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