

Short note | Nota breve

First confirmed occurrence of Gervais' beaked whale *Mesoplodon europaeus* (Gervais, 1855) in the Cape Verde Islands

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On 15 May 2013, on the beach near Calheta de Baixo, Maio Island, Cape Verde Islands (15°13'20"N, 23°13'12"W), the remains of a stranded cetacean were found. The animal had been butchered by local inhabitants and most of the flesh and blubber, as well as the intestines, had been removed, while the tail fluke had been chopped off (Fig. 1). However, with the skull still present, it was immediately clear that it concerned a beaked whale *Mesoplodon* sp. The single pair of teeth (one of which was broken) placed back from the apex in the lower jaw (Fig. 2) allowed the animal to be identified as a male Gervais' beaked whale *M. europaeus* (Gervais, 1855). The intact tooth was removed from the left side of the jaw (Fig. 3) and preserved in 70% ethanol. Tooth height from tip to end of root was 7.1 cm. The following body measurements were taken – length of rostrum from tip to external nares: 53 cm; length of mandible from tip to root: 60.5 cm; width of skull at widest point: 38 cm. Total length (from tip of beak to last vertebra) was 3.80 m, which – compensating for the chopped off fluke – is within the normal range of male Gervais' beaked whale (cf. MacLeod 2006). A skin sample was taken and preserved in 96% ethanol. In addition, the stomach was recovered, which – except for two unidentified fragments of squid beaks – proved to be empty. Skull and skeleton were buried and will remain so for at least 12 months to clear the bones from the remaining tissue. All samples and skeletal parts are (or will be, in the case of those parts still buried at present)

curated at the premises of the Fundação Maio Biodiversidade (Porto Inglês, Maio) and will be available for future study.



Fig. 1-2. Gervais' beaked whale *Mesoplodon europaeus*, Calheta de Baixo, Maio, Cape Verde Islands, 15 May 2013. © Fundação Maio Biodiversidade.



Fig. 3. Tooth of Gervais' beaked whale *Mesoplodon europaeus*, Calheta de Baixo, Maio, Cape Verde Islands, 15 May 2013. © Fundação Maio Biodiversidade.

Local inhabitants at the stranding site were asked whether the animal, when first encountered, was still alive, but answers were ambiguous and it was not possible to get an unequivocal opinion. However, the very fact that it was butchered suggests that the whale must have been very fresh, if not indeed alive. Due to the mutilated state of the carcass, it was not possible to assess the possible cause of the stranding through post-mortem dissection.

This is the first confirmed record of Gervais' beaked whale for the Cape Verde Islands, as well as the first registered stranding of a beaked whale in the archipelago. Four beaked whales observed and photographed off the island of Sal in February 2010 were only tentatively identified as *Mesoplodon cf. europaeus*, because none of the pictures clearly showed the diagnostic beak (Hazevoet *et al.* 2010).

As is the case with beaked whales in general, little is known about the life history of Gervais' beaked whale and almost all data on its biology and distribution come from stranded animals. *M. europaeus* is categorized as 'data deficient' in the

IUCN Red List of Threatened Species (Taylor *et al.* 2008).

Mesopelagic cephalopods appear to be the primary food of *M. europaeus* and indeed of all beaked whales (Mead 1989, Norman & Mead 2001), which agrees with the fragments of squid beaks found in the Maio specimen's stomach. The species appears to be largely restricted to deep waters of the warm-temperate and tropical Atlantic, with the large majority of records coming from the western North Atlantic (Mead 1989, Norman & Mead 2001, MacLeod *et al.* 2006). In the western Atlantic, the northernmost record is from Massachusetts, USA (Moore *et al.* 2004) and the southernmost from São Paulo State, Brazil (Santos *et al.* 2003). Most records in the western Atlantic are from the southeastern USA and the Caribbean region (e.g. Mead 1989, Debrot 1998, Debrot *et al.* 1998, Rosario-Delestre *et al.* 1999, Norman & Mead 2001, MacLeod *et al.* 2006). In the eastern Atlantic, the northernmost (presumably extralimital) records are from Ireland (Berrow & Rogan 1997), the English Channel (type locality, hence the specific epithet) (Gervais 1855, Deslongchamps 1866) and France (Van Canneyt *et al.* 1999). Further south, there are records from Portugal (Sequeira *et al.* 1992, 1996) and Spain (Valverde & Galán 1997) and there is a single record (most likely a vagrant) from the Mediterranean (Podestà *et al.* 2005). In Macaronesia, there are records of Gervais' beaked whale in the Canary Islands (Martin *et al.* 1990, 2004, Carillo *et al.* 2010), Madeira (Freitas *et al.* 2012) and the Azores (Reiner *et al.* 1993). In West Africa, there is a stranding record from Mauritania (Robineau & Vely 1993), while Reiner (1980) reported a skull found at an unspecified location in Guinea-Bissau. In the eastern Atlantic, the southernmost records are from Ascension Island (Mead 1989) and northern Namibia (Wojtek & Norman 2014). There are as yet no records from West African waters from the Gulf of Guinea to Angola (Weir 2010), which may be due to the lack of local stranding reporting schemes and trained cetologists rather than to the absence of beaked whales.

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