



Short Note | Nota Breve

Recent and noteworthy records of Cetacea from the Cape Verde Islands

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During August-September 2014 and 2015, yacht-based surveys were conducted in the Cape Verde archipelago with the main objective of trying to locate humpback whales *Megaptera novaeangliae* during the late boreal summer (Berrow *et al.* 2014). Spring breeding humpbacks in Cape Verde waters are known to have their feeding grounds in the high Arctic (*e.g.* Wenzel *et al.* 2009). While these animals have generally left the breeding grounds by mid-May, a number of sightings during the summer months (June-August) have raised the possibility that animals from southern stocks may occasionally reach as far north as Cape Verde (Hazevoet *et al.* 2011). The cruise plans of both surveys were designed to maximize survey effort in those locations with recent sightings of humpback whales (*e.g.* off the island of Maio; E. Magileviciute unpublished data), as well as visiting habitats that are known to hold humpback whales during the spring (*e.g.* off the island of Boa Vista; Ryan *et al.* 2014). In 2014, 12 days were spent at sea (31 August-11 September) and a total of 1,182 km of track line surveyed. A continuous watch for cetaceans was maintained from the yacht during daylight hours. All cetacean species were recorded with a best estimate of numbers, presence of calves and behaviour. Apart from Maio and Boa Vista, waters off the islands of Santiago, São Vicente, Santa Luzia and São Nicolau, as well as Branco and Raso islets, were surveyed.

Seven cetacean taxa were identified to species level and two more to genus level. Humpbacks were the only baleen whale species recorded. We recorded eight odontocete taxa, including melon-headed *Peponocephala electra* and short-finned pilot *Globicephala macrorhynchus* whale and rough-toothed *Steno bredanensis*, pantropical spotted *Stenella attenuata* and Atlantic spotted *S. frontalis* dolphin (see Berrow *et al.* 2014), all of which are frequently reported from Cape Verde waters. Here we report on sightings of taxa the occurrence of which in Cape Verde seas has not or only rarely been established. Also included are a few recent stranding data from Boa Vista.

BEAKED WHALES There were two sightings of beaked whales *Mesoplodon* sp. One group of four individuals, including a calf or small juvenile, were observed at 14°.96722'N, 23°.40863'W (between Maio and Santiago) in very rough seas (Force 8) on 7 September 2014. They were observed for around 20-30 seconds during which time they surfaced on three occasions with poor images taken on the third surfacing (Fig. 1). They were *ca* 5-7 m in length, light brown in colouration with a broad triangular shaped dorsal fin. The beak appeared above the water on surfacing, with the head also apparent. Images taken were too poor to establish their identity at the species level.



Fig. 1. Unidentified beaked whale *Mesoplodon* sp. between Maio and Santiago, 7 September 2014.
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Fig. 2. Unidentified beaked whale *Mesoplodon* sp. off Praia, Santiago, 8 September 2014.
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The second sighting of beaked whales was near the port of Praia on Santiago (14°.88846'N, 23°.51483'W) on 8 September 2014. A number of small (maximum *ca* 5 m in length) grey coloured whales surfaced near the vessel but travelling away, making it difficult to see their head or beak (Fig. 2). There were four animals in total, including one calf. On surfacing, their beak was raised clear of the water before being slapped down onto the surface of the water. Good HD film of the whales was obtained and sent to a number of beaked whale specialists for species identification (see Acknowledgements). Although these consultants thought they could have been Gervais' beaked whale *M. europaeus*, the footage was considered not quite good enough to unequivocally confirm species identification.

Previously, the occurrence of *Mesoplodon* spp. in Cape Verde seas was known from only three occasions, *i.e.* the stranding of a single *M. europaeus* on Maio, 15 May 2013 (Koenen *et al.* 2013), and a Blainville's beaked whale *M. densirostris* photographed off northern Boa Vista, 14 April 2011 (Wenzel & López Suárez 2012). Four beaked whales observed and photographed

off southern Sal, 11 February 2010, were tentatively identified as *Mesoplodon* cf. *europaeus* (Hazevoet *et al.* 2010).

DWARF OR PYGMY SPERM WHALE Two small whales were observed off Tarrafal, São Nicolau (16°.40329'N, 24°.3298'W) on 1 September 2014. One was seen breaching twice (Fig. 3). Based on the robust body, large bulbous head and proportionally small flippers, they were identified as either dwarf *Kogia sima* or pygmy sperm whale *K. breviceps*, but the short time of observation and poor quality of footage obtained did not allow for identification to species level. There were no observations of live *Kogia* spp. in Cape Verde seas prior to the present sighting, the only record being of a stranded dwarf sperm whale on Boa Vista in August 2004 (Hazevoet *et al.* 2010).



Fig. 3. Breaching *Kogia* sp. off Tarrafal, São Nicolau, 1 September 2014. © Tony Whelan (video grab¹).

KILLER WHALE A pod of five killer whales *Orcinus orca*, consisting of an adult male, a juvenile and three others, was seen off Tarrafal, Santiago (16°.52157'N, 24°.37805'W) on 10 September 2014 (Fig. 4). Images were submitted to the North Atlantic Killer Whale Catalogue, but it has as yet not been possible to match these individuals (Andrew Foote *in litt.*).

There were only three documented sighting records of killer whales in Cape Verde seas prior to this record, *i.e.* a pod of nine animals off southern Sal, 29 February 1996, one off western Boa Vista, 21 September 2001, and six animals off southern Sal, 23 November 2013 (Hazevoet & Wenzel 2000, Hazevoet *et al.* 2010, Cozens 2014). In addition, 2-3 individuals (including an adult male) were seen 700 m off Ponta Preta, Sal, 21 July 2015 (Anonymous 2015), bringing the total number of killer whale records in Cape Verde during the past 20 years to five.

¹ For video see <http://tinyurl.com/qhuseuo>



Fig. 4. Killer whales *Orcinus orca* off Tarrafal, Santiago, 10 September 2014.
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Fig. 5. Fraser's dolphin *Lagenodelphis hosei*, off Tarrafal, São Nicolau, 30 August 2015.
© Pedro López Suárez. Fig. 6. Fraser's dolphin, Praia de João Barrosa, Boa Vista, 17 July 2015.
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RISSE'S DOLPHIN While sailing from Maio to São Nicolau on 6 September 2015, 6-7 adult Risso's dolphins *Grampus griseus* were seen milling at the surface at 15°.28848'N, 23° 27271'W (Fig. 7-8). Although Risso's dolphin is a cosmopolitan tropical and warm temperate taxon, there were only two previous records from Cape Verde seas, *i.e.* at least three animals in the lee of Raso, 25 January 1989, and *ca* 20 animals off eastern Santo Antão, 26 June 1993 (Hazevoet & Wenzel 2000).

FRASER'S DOLPHIN In the early morning of 30 August 2015, a large mixed school of dolphins

was encountered south of Tarrafal, São Nicolau. There were *ca* 150 Fraser's dolphins *Lagenodelphis hosei* (Fig. 5), > 100 melon-headed whales and a few short-finned pilot whales. In addition, there were two strandings of Fraser's dolphin – a dead adult at Praia Cabral, Boa Vista, 24 February 2014, and an adult, still alive and returned to the sea, at Praia de João Barrosa, Boa Vista, 17 July 2015 (Fig. 6). Previously, there were only two records of Fraser's dolphin, *i.e.* a pod of *ca* 20 animals about 5 nm southwest of São Nicolau, 31 August 2003, and a stranding of one at Praia de Curral Velho, Boa Vista, 10 March 2006 (Torda *et al.* 2010).



Fig. 7-8. Risso's dolphins *Grampus griseus* between Maio and São Nicolau, 6 September 2015.
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REFERENCES

- Anonymous, 2015. Ilha do Sal - Orca avistada a 700 m da costa de Ponta Preta. Ocean Press, 10 September 2015.
<http://tinyurl.com/nbzrj7x>
- Berrow, S., P. López Suárez, B. Jann, J. O'Brien & C. Ryan, 2014. Cape Verde Expedition 2014. Unpublished report, Irish Whale and Dolphin Group. 24 pp.
- Cozens, J., 2014. Killer whales off Sal in November 2013. Notícias Zoológicas (Boletim de Sociedade Caboverdiana de Zoologia) 4: 3.
- Hazevoet, C.J. & F.W. Wenzel, 2000. Whales and dolphins (Mammalia, Cetacea) of the Cape Verde Islands, with special reference to the humpback whale *Megaptera novaeangliae* (Borowski, 1781). Contributions to Zoology 69: 197-211.
- Hazevoet, C.J., V. Monteiro, P. López, N. Varo, G. Torda, S. Berrow & B. Gravanita, 2010. Recent data on whales and dolphins (Mammalia: Cetacea) from the Cape Verde Islands, including records of four taxa new to the archipelago. Zoologia Caboverdiana 1: 75-99.
- Hazevoet, C.J., B. Gravanita, P. López Suárez & F.W. Wenzel, 2011. Seasonality of humpback whales *Megaptera novaeangliae* (Borowski, 1781) records in Cape Verde seas: evidence for the occurrence of stocks from both hemispheres? Zoologia Caboverdiana 2: 25-29.
- Koenen, F., E. Magileviciute, J. Rodrigues & C.J. Hazevoet, 2013. First confirmed occurrence of Gervais' beaked whale *Mesoplodon europaeus* (Gervais, 1855) in the Cape Verde Islands. Zoologia Caboverdiana 4: 49-52.
- Ryan, C., F.W. Wenzel, P. López Suárez & S.D. Berrow, 2014. An abundance estimate for humpback whales *Megaptera novaeangliae* breeding around Boa Vista, Cape Verde Islands. Zoologia Caboverdiana 5: 20-28.
- Torda, G., P. López Suárez & L.F. López Jurado, 2010. First records of Fraser's dolphin *Lagenodelphis hosei* for the Cape Verde Islands. Zoologia Caboverdiana 1: 71-73.

- Wenzel, F.W. & P. López Suárez, 2012. What is known of cookiecutter shark (*Isistius* spp.) interactions with cetaceans in Cape Verde seas? *Zoologia Caboverdiana* 3: 57-66.
- Wenzel, F.W., J. Allen, S. Berrow, C.J. Hazevoet, B. Jann, R.E. Seton, L. Steiner, P. Stevick, P. López Suárez & P. Whooley, 2009. Current knowledge on the distribution and relative abundance of humpback whales (*Megaptera novaeangliae*) off the Cape Verde Islands, eastern North Atlantic. *Aquatic Mammals* 35: 502-510.

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