

SHORT COMMUNICATION

Stranding of a minke whale on the eastern Mediterranean coast of Turkey, April 2015

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Abstract

Minke whale, *Balaenoptera acutorostrata* Lacépède, 1804, is known as a visitor species in the Mediterranean Sea. On 10 April 2015, a female minke whale stranded in Yumurtalık on the eastern Mediterranean coast of Turkey. The body length and body weight were measured as 3.55 m and 400 kg, respectively. The carcass was necropsied, however the reason of the stranding was not evident due the advanced stage of decomposition. This is the second case of minke whale stranding in Turkey.

Keywords: Minke whale, *Balaenoptera acutorostrata*, stranding, eastern Mediterranean Sea

Minke whale, *Balaenoptera acutorostrata* Lacépède, 1804, is a cosmopolitan species, whose distribution ranges the whole Atlantic and Pacific Oceans in the Northern Hemisphere. The Antarctic mink whale, *B. bonaerensis*, has recently been recognized as genetically and morphologically distinct from the minke whale of the Northern Hemisphere.

While it is a common species in the North Atlantic Ocean, including the coastal of European Continent, the minke whale is a rare species in the Mediterranean Sea and listed as a visitor species by Notarbartolo di Sciara and Birkun (2010). Its occurrence has been reported mainly in the western Mediterranean Sea, where the connection to the Atlantic is easier with the Gibraltar Strait. In the eastern Mediterranean, however, their occurrence is rather rare. There have been four reports of stranded animals and several live sightings from the Mediterranean coast of Israel (Kerem *et al.* 2012). In the Aegean Sea, there is a

report on one stranding minke whale by Verriopoulou *et al.* (2001). On the Turkish coast of the Mediterranean Sea, there has been only one record of the minke whale (Öztürk *et al.* 2013).

A female minke whale was reported stranding on the coast of Yumurtalık, Adana Province (Figure 1), on 10 April 2015. It was found by the Coast Guard near the shore of the petrol transportation company (BIL-BOTAŞ). It was towed to their station and reported to us with photographs, by which we identified the specimen as minke whale, *B. acutorostrata* (Figure 2). It had a distinct triangle shaped head when seen from the dorsal side and the middle part of the flipper had a wide white band. The specimen was retrieved and brought to Istanbul for further examination. The specimen was weighed about 400 kg by using a truck scale.

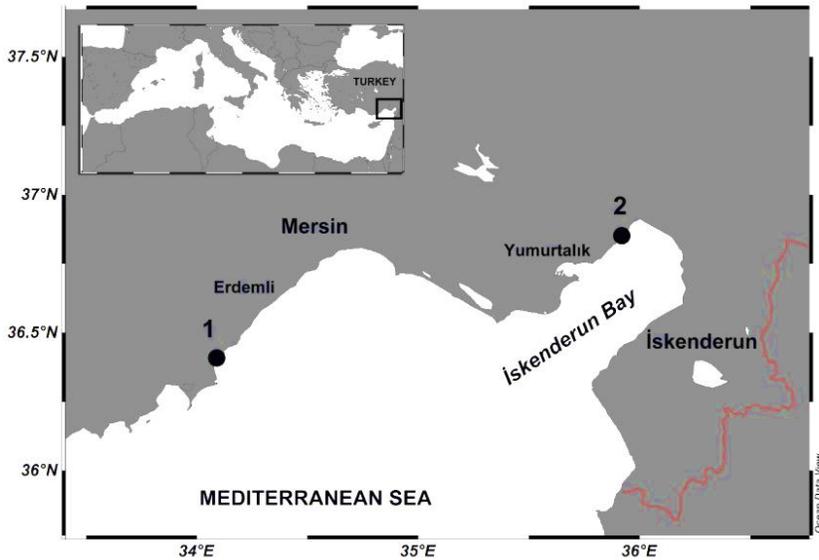


Figure 1. Locations of the minke whale strandings on the Turkish coast of the eastern Mediterranean, 1: the first report (Öztürk *et al.* 2013) from Erdemli, 2: the second report (present study) from Yumurtalık

The necropsy was carried out on 12 April 2015 in Istanbul. The specimen was photographed and the whole process was filmed. Table 1 shows the measurements of external morphology.

The length at birth is known as 2.4-2.8 m and adult minke whales generally reach just over 9 m (Jefferson *et al.* 1993). This specimen can be considered as a calf, according to Van Waerebeek *et al.* (1999) who identified minke whales smaller than 450cm are calves in their study. Presence of such a small animal

implies that there are at least some females breeding in the Mediterranean Sea, as suggested by Van Waerebeek *et al.* (1999).



Figure 2. A stranded minke whale hung by the winch at the Coast Guard station in Yumurtalik

There was no obvious wound or cut, but at least four ectoparasites were found, preliminarily identified as *Pennella* sp., on the body of the whale (Figure 3). They were collected for further morphological study.

The internal organs were examined and tissue samples were collected for genetic and toxicological analysis. However, the specimen was at the advanced stage of decomposition (Stage 3-4 based on criteria in Rowles *et al.* 2001) which made it impossible to clarify the reason of the mortality. There was no remain of fish bones or otolith found in the stomach. The whale was in poor

nutritive condition implied by its thin blubber and the *longissimus dorsi* (LD) muscle which was visibly concave. The whale was then buried in the ground for the preparation of its skeletal specimen.

Table 1. Measurements of the minke whale specimen stranded in Yumurtalık, Turkey.

Measured part (Left side)	Measurement or count
From tip of lower jaw to fluke notch	355 cm
From tip of lower jaw to anus	266 cm
From tip of lower jaw to genital opening	253 cm
From tip of lower jaw to anterior margin of dorsal fin	237 cm
From tip of lower jaw to posterior end of ventral grooves	183 cm
From tip of lower jaw to anterior margin of pectoral fin	105 cm
From tip of lower jaw to posterior corner of mouth gape	67 cm
From tip of lower jaw to eye	60 cm
Difference between tips of lower and upper jaws	7 cm
Span (maximum width) of caudal fins	77 cm
Height of dorsal fin	11 cm
Length of pectoral fin along anterior margin	50 cm
Blubber thickness on lateral side behind pectoral fin	3 cm
Blubber thickness on dorsal side above pectoral fin	2.5 cm
Number of baleen plates (left)	290+
Number of baleen plates (right)	292+



Figure 3. *Pennella* sp. on the minke whale.

Previously Öztürk *et al.* (2011) reported a stranding minke whale on the coast of Erdemli, Mersin in August 2005, which was the first case of the minke whale stranding on the Turkish coast. The location of the present case was very close to Erdemli, Mersin (Figure 1). There can be more strandings or even live

sightings of this species with more effort made in the eastern Mediterranean Sea. A revised inventory of cetacean species in the area should be elaborated.

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Türkiye'nin doğu Akdeniz kıyısında Nisan 2015'te karaya vuran Mink Balinası

Özet

Mink Balinası *Balaenoptera acutorostrata* Lacépède, 1804 Akdeniz'de konuk tür olarak bilinmektedir. 10 Nisan 2015 tarihinde dişi bir mink balinası Türkiye'nin doğu Akdeniz'de, Yumurtalık kıyısında karaya vurdu. Vücut uzunluğu ve ağırlığı sırasıyla 3.55m ve 400kg olarak ölçüldü. Karkasa nekropsi yapıldı ancak ileri derecede bozunmuş olduğundan dolayı neden karaya vurduğu tespit edilemedi. Bu vaka Türkiye kıyıları için ikinci mink balinası karaya vurması olayıdır.

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