First stranding record of a harbour porpoise  
(*Phocoena phocoena*) in the Southern Aegean Sea

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Abstract

A stranding of a harbour porpoise (*Phocoena phocoena*) was reported for the first time in the Southern Aegean Sea. This is the twelfth confirmed and the southern record of this species in the Aegean Sea. *Pennella* sp. infestation is reported for the first time on a phocoenid species.

Key words: Harbour porpoise, *Phocoena phocoena*, Aegean Sea, Pennella, ectoparasite infestation.

Introduction

The harbour porpoise (*Phocoena phocoena*) live in cold temperate to sub-polar waters of the Northern Hemisphere; Northern Pacific, the Northern Atlantic and the Black Sea (Hammond et al. 2008). The fragmentation of harbour porpoise distribution in the Mediterranean Sea was triggered approximately 5000 years ago during the warm ‘Mid-Holocene Optimum’ (Fontaine et al. 2010) and is recognized as the subspecies *Phocoena phocoena relicta* in the Black Sea by morphological and genetic studies (e.g. Viaud-Martinez et al. 2007; Galatius and Gol’din 2011).

In the Turkish waters it is predominantly found in the Black Sea. Its occurrence was, however, first described as "sometimes" in the Marmara Sea and "very rare" in the Mediterranean by Devedjian (1926). There have been several records of sightings and strandings in the Turkish Straits System (TSS),
especially in the Istanbul Strait (Dede et al. 2008; Ozturk et al. 2009; Tonay et al. 2009; Dede 2010). There are two records of stranded harbour porpoises in the Northern and Central south Turkish Aegean Sea coast; one in Saroz Bay (Tonay et al. 2009) and the other in Izmir Bay (Güçlüsoy 2008). Besides these records, nine records of strandings and sightings of harbour porpoises have been reported in the Greek Northern Aegean Sea since 1993 (Frantzis et al. 2003; Notarbartolo di Sciara and Birkun 2010) (Figure 1). On the other hand, the subspecies of harbour porpoise *P. phocoena phocoena* of the North Atlantic was recorded in the Mediterranean Sea in 1822 (Adriatic Sea), in 1981 and 2006 (Alborán Sea) (Notarbartolo di Sciara and Birkun 2010).

![Figure 1](https://example.com/image.png)

*Figure 1.* Locations of the stranded harbour porpoise in the Aegean Sea (star) with other confirmed records (dots) of sightings and strandings in the Aegean Sea and Çanakkale Strait according to Birkun and Frantzis (2008); Güçlüsoy (2008); Tonay et al. (2009)
Although the connectivity between the Black Sea and Northern Aegean Sea harbour porpoises has been suggested according to genetic studies, it is still possible that they may represent separate subpopulations in the Aegean Sea (Rosel et al. 2003; Notarbartolo di Sciara and Birkun 2010). In addition, the haplotype found in four individuals in the Marmara Sea suggests that harbour porpoises in this water body may be genetically differentiated from both the Black Sea and Northern Aegean Sea populations (Viaud-Martinez et al. 2007; Tonay et al. 2012).

On 10 January 2013, one adult female harbour porpoise stranded dead on the coast of Torba village of Bodrum Peninsula (37° 4.904'N, 27° 27.714'E) in the Southern Aegean Sea coast of Turkey (Figures 1 and 2). On the following day, the external examination and measurement were made, as well as its necropsy was done. Body length was 141.5cm. It was in bad nutritive condition, its blubber was thin, longissimus dorsi and neck visibly concave and the nutritive condition code (NCC; Jauniaux et al. 2005) was 4. Right lateral side was damaged, internal organs were almost decomposed (Decomposition Condition Code 4). Intense ectoparasite infestation of Pennella sp. was observed all over its body. Some tissues (skin, ovary, teeth etc.), skull and parasites were sampled for further analyses.

This stranding provides the first confirmed presence of the species in the Southern Aegean Sea. It is also the first infestation case of Pennella sp. on a phocoenid species, according to the list of parasites and hosting cetacean species in Aznar et al. (2001). After genetic and morphological studies, the origin of the specimen will be determined.

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Güney Ege Denizi’nde bir muturun (Phocoena phocoena) ilk karaya vurma kaydı

Özet
Güney Ege Denizi’nde ilk defa karaya vuran Mutur (Phocoena phocoena) rapor edilmiştir. Bu türün Ege Denizi’ndeki doğrulanan 12. kaydıdır. Penella sp. dış parazit enfestasyonu Phocoenidae familyasında ilk defa rapor edilmiştir.
Figure 2. Stranded specimen of harbour porpoise (*Phocoena phocoena*) on the beach, Torba village of Bodrum Peninsula (a: left side, b: right side)
References


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