MARINE MAMMAL STRANDINGS ON THE TURKISH AEGEAN SEA COASTS: FISHERMEN REPORTS

Harun Guçlüsoy 1* and Şükran Cirik 2

¹ Institute of Marine Sciences and Technology, Dokuz Eylül University, Izmir - harun.guclusoy@deu.edu.tr
² Faculty of Fisheries, Çanakkale Onsekiz Mart University, Çanakkale

Abstract

This study assesses the anecdotal marine mammal stranding reports of fishermen from the central Turkish Aegean fishing ports. For this, a poll survey was conducted with 30 % (n=179) of the fishermen. Forty-four reports involving Delphinidae (n=38), *Physeter macrocephalus* (n=4) and *Monachus monachus* (n=2) were collected. One of the reported *P. macrocephalus* was misidentified. *Keywords: Cetacea, Eastern Mediterranean.*

Introduction

Our knowledge of the marine mammals with the exception of the *M. monachus* [e.g. 1] of the Turkish Seas is scarce. To date, a few opportunistic studies were carried out along the Turkish Aegean Sea. The occurrence of *Delphinus delphis*, *Grampus griseus*, *P. macrocephalus*, *Stenella coeruleoalba*, *Tursiops truncatus*, *Ziphius cavirostris* and *Pseudorca crassidens* were reported from this region [2,3,4]. With the present study, we aim to collect and assess the anecdotal marine mammal stranding reports of the fishermen from the central part of the Turkish Aegean Sea coasts.

Methodology

This study was a part of the poll survey among the fishermen, and was conducted from November 2003 to November 2004 at 8 fishing ports located between Ayvalik and Didim-Taşburun (Fig.1).

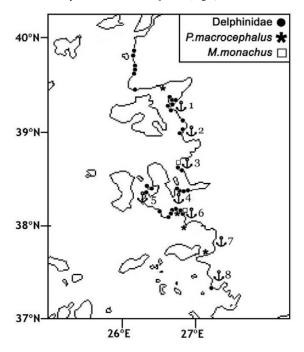


Fig. 1. The locality of fishing ports from north to south (1) Ayvalik, (2) Dikili, (3) Foça, (4) Urla, (5) Çeşme Dalyanköy, (6) Siğacik, (7) Kuşadasi and (8) Didim-Taşburun, and stranding localities of marine mammals - 7 of them overlaps - in the Turkish Aegean coasts.

It was aimed that 30 % of the artisanal fishing boat owners at each port to be inquired. Moreover, the same approach - the number of skippers/owners was derived from [5] - was also used for entire fleet of purse-seiners and trawlers - regardless of their port of origin - of the whole study area. The fishermen were interviewed singly so as to prevent being influenced by each other's responses. Prior to questionnaire application, each of them was shown with three cards, measuring 22 x 28 cm, depicted black and white drawings [6] - with scale - of the followings species: Balaenoptera physalus, Balaenoptera acutorostrata, P. macrocephalus, Z. cavirostris, P. crassidens, Orcinus orca, Globicephala melas, D. delphis, T. truncatus, G. griseus, S. coeruleoalba, Phocoena phocoena and M. monachus. For the present study, each fisherman was asked to show

which species he saw stranded and its locality.

Results and Discussion

During study period, a total of 179 (30 %) fishermen were inquired. Except in one occasion, involving two unidentified small delphinids, they all reported single animal strandings (n=43), as expected from the vicinity of the ports, between 1989 and 2004 (Fig.1). Though a weak evidence on mass stranding due to an epizootic were reported previously [3], no mass die-off was reported from the region. Because the majority of the stranding reports comprised dead animals (n=37) and/or seen from distance, the fishermen could not accurately identify the small cetacean species from the drawings shown. Therefore, all of them were categorised as Delphinadae in Figure 1. Moreover, they reported four P. macrocephalus strandings among which one of them - the southernmost standing in Figure 1 - was not the species that they claimed. This species well identified to be a B. physalus [7]. In addition, M. monachus (n=2) strandings were also reported from the current distribution range of the species in the region [1]. Though the reported number of injured stranded animals from deliberate killing attempts was expected to be negatively bias, there still be two incidences reported (Tab.1). As mentioned previously [2,3], with the line of our findings (20 strandings between 2001 and 2003), we still believe a functioning stranding network is still required for better monitoring of the marine mega-fauna along the Aegean sea coasts.

Tab. 1. Live stranded Delphinidae in the Central Turkish Aegean Sea coasts.

LOCALITY	DATE	AGE CLASS	CAUSE
Alibeyköy Island, Ayvalik	04.2003	?	?
Alibeyköy Island, Ayvalik	01.2004	Calf	?
Alibeyköy Island, Ayvalik	1989	?	Injured
Ayvalik	2002	?	Pellet wound
Dikili	Summer 2002	?	?
Hekim Island, Urla	06.2003	Calf	Injured
Taşburun, Didim	Summer 1997	?	Pellet wound

References

- 1 Güçlüsoy, H., Kiraç, C.O., Veryeri, N.O. and Sava_, Y. 2004. Status of the Mediterranean monk seal *Monachus monachus* (Hermann, 1779) in the coastal waters of Turkey. *E.U. J.Fish.* & *Aquat. Sci.*, 21(3-4): 201-210. 2 Güçlüsoy, H., Veryeri, N. and Cirik, Ş. 2004. Cetacean strandings along the coast of Izmir Bay, Turkey. *Zool. Middle East*,33:163-168.
- 3 Öztürk, B. and Öztürk, A.A. 1998. Cetacean strandings in the Aergean and Mediterranean coasts of Turkey. *Rapp. Comm. int. Mer Médit.*,35(2): 476.
- 4 Öztürk, B., Öztürk, A.A. and Dede, A. 2001. Dolphin bycatch in the swordfish driftnet fishery in the Aegean Sea. *Rapp. Comm. int. Mer Médit.*, 36: 308.
- 5 Kara, Ö.F. and Gurbet, R. 1999. Ege Denizi endüstriyel balikçilişi üzerine araştırma. T.C. Tarim ve Köyişleri Bakanlışı, Bodrum Su Ürünleri Araştırma Enstitüsü Müdürlüşü Yayınları, (B) (5): 1-135.
- 6 Fischer, W., Bauchot, M.-L. and Schneider, M. 1987. Fiches FAO d identification des espèces pour les besoins de la pêche. Méditerranée et mer Noire. Zone de pêche 37. FAO and EEC, Rome, 761-1530.
- 7 Öztürk, A.A., Öztürk, B. and Dede, A. 2001. A fin whale stranding on the Mediterranean coast of Turkey. *European Research on Cetacean*, 15: 341.