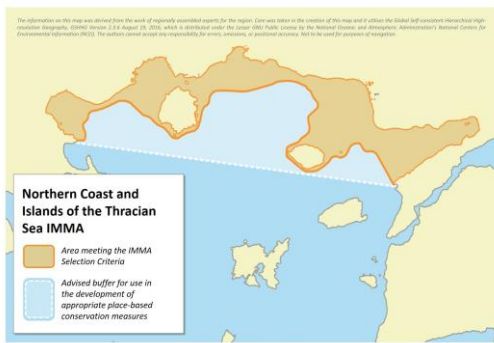


Northern Coast and Islands of the Thracian Sea Important Marine Mammal Area - IMMA

Description

The area is highly productive due to the input of trans-frontal river waters, upwellings and the input of nutrient-rich water from the Black Sea. The area includes some of the most important fishery grounds of the Aegean Sea. Rare species of corals are found there. The area comprises the large North Aegean continental shelf, ending at the North Aegean trench (more 1,000 m depth). It is known as the most productive part of the Eastern Mediterranean in terms of primary production and small pelagic fisheries, such as sardines and anchovy. Almost 40% of all the fish species known to occur in the waters surrounding Greece can be found in the Northern Aegean Sea/Thracian Sea between 100-400 m depth, including 28 elasmobranchs, some of which are protected. More than 30 Natura 2000 sites have been identified as biodiversity hotspots in the area, mainly due to the presence of seagrass *Posidonia oceanica* meadows, and brown algae (*Cystoseira* spp.) forests. This general situation is conducive to the presence of populations of top marine predators (CBD, 2014).

The area for harbour porpoises is delimited by the coastline and the 100m isobath, because that is where all sightings (visual and acoustic) of the species were made. This area is in large part within Greek territorial waters but it includes portions of high seas as well as some Turkish territorial waters. The body size of the Aegean harbour porpoise is thought to be the same of that of the Black Sea population, which is smaller than the Atlantic population. The available information on body length is coming from 13 stranded specimens (M.



Phocoena phocoena relicta
Criterion A; B (i); C (i, ii)

Marine Mammal Diversity

[*Delphinus delphis*, *Tursiops truncatus*,
Stenella coeruleoalba, *Monachus monachus*]

Summary

The northern coast areas and islands of the Thracian Sea contain important habitat for Endangered Black Sea harbour porpoises (*Phocoena phocoena relicta*), used for foraging and possibly calving between the coastline and the 100 m isobath. Multiple observations of live specimens have been recorded in recent years.

Koutrakis, pers. comm., Pelagos Cetacean Research Institute, unpublished data). The total length of eight females was 1.03-1.57 m with an average of 1.35 m (sd=0.19). The total length of six males was 1.13-1.35 m with an average of 1.25 m (sd=0.08). A male 1.45 m long recently stranded in the Turkish Aegean coast (Tonay and Dede, 2013).

Other species such as common dolphins *Delphinus delphis* and bottlenose dolphins *Tursiops truncatus* have been sighted in the area but further information is necessary to determine their status within the IMMA.

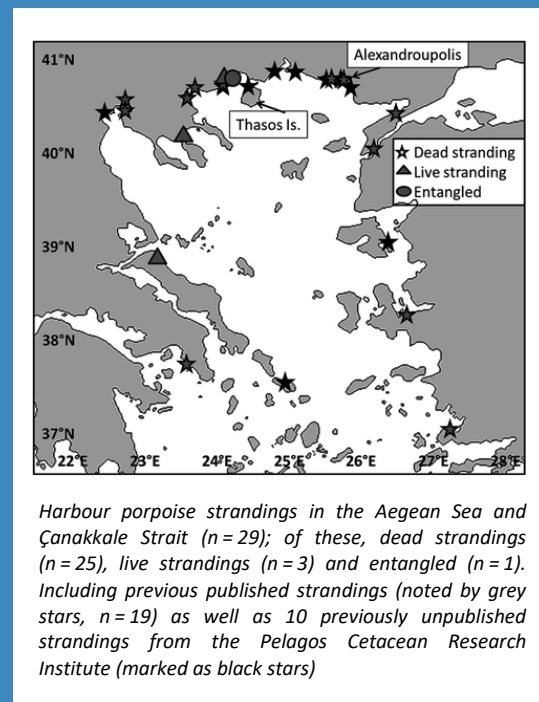
Criterion A - Species or Population Vulnerability

The area contains habitat for the Black Sea subspecies of harbour porpoises, *Phocoena phocoena relicta*, listed as EN in the IUCN Red List. Information is based on dedicated sighting cruises, occasional sightings, and the stranding record (Cucknell et al., 2016; Pace et al., 2016).

Criterion C: Key Life Cycle Activities

Sub-criterion Ci: Reproductive Areas

A harbour porpoise calf was observed during a survey conducted in 2009 (Cucknell et al., 2016), which implies that breeding takes place in the area, although direct observation of breeding behavior has not been made yet.



Criterion C: Key Life Cycle Activities

Sub-criterion Cii: Feeding Areas

Stomach contents of stranded harbour porpoises (N=5) in the area attest to the fact that the animals are feeding there (Milani et al., 2017). Their diet mainly consists of *Gobiidae*, followed by *Clupeidae*. Confidence is high because of information based on abundant observations published and recent. Additionally, the stomach contents of other cetacean species (*T. truncatus*, *D. delphis*, *S. coeruleoalba*, and *G. griseus*) were studied in the northern Greek Aegean Sea. *D. delphis* fed mainly on species from the *Clupeidae* and *Myctophidae* and a few cephalopods; *T. truncatus* primarily on *Ophidion barbatum* (snake blenny), *Boops boops* (bogue), *Clupeidae* and cephalopods; *S. coeruleoalba* on small pelagic fish and especially on *Myctophidae* and few cephalopods (Milani et al., 2017). Although important commercial fisheries species were found during diet analysis, in none of the stomachs investigated their presence was considered dominant on other species. Results of the trophic level calculated from the diet indicated the

common dolphin as a top predator in the food web of the region (Pace et al., 2016).

Supporting Information

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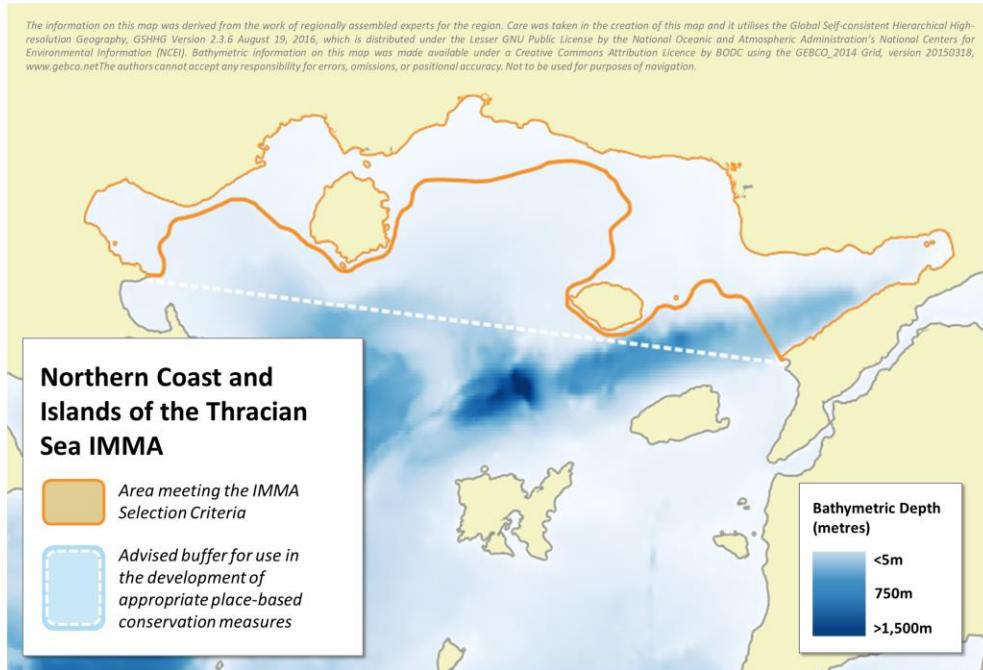
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Annex I

Supplementary Maps



Annex II

List of Primary and Secondary Species

Primary Species – Meet the IMMA Selection Criteria

Scientific Name	Common Name of Species	Population / Subpopulation Name	IUCN Red List Status
<i>Phocoena phocoena relict</i>	Black Sea harbour porpoise	Aegean Sea subpopulation (?)	Endangered

Secondary Species – Do not individually meet the IMMA Selection Criteria but are present within the area

Scientific Name	Common Name of Species	Population / Subpopulation Name	IUCN Red List Status
<i>Delphinus delphis</i>	Common dolphin	Mediterranean Subpopulation	Endangered
<i>Tursiops truncatus</i>	Common bottlenose dolphin	Mediterranean Subpopulation	Vulnerable
<i>Stenella coeruleoalba</i>	Striped dolphin	Mediterranean Subpopulation	Vulnerable
<i>Monachus monachus</i>	Mediterranean monk seal	Aegean Subpopulation	Endangered