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Area Size

703 km²

Qualifying Species and Criteria

Black Sea harbour porpoise –
Phocoena phocoena relicta
Criteria A, C2, C3

Marine Mammal Diversity

Tursiops truncatus ponticus,
Phocoena phocoena relicta

Summary

The Kerch Strait and Taman Peninsula IMMA is located between the Kerch Peninsula and Taman Peninsula and includes coastal waters with depths between 0 and 30 m. The Kerch Strait connects the Sea of Azov and the Black Sea, and is an important migratory pathway for marine resources, including various fish species as well as for two cetacean subspecies: harbour porpoise (*Phocoena phocoena relicta*) and bottlenose dolphin (*Tursiops truncatus ponticus*). Every spring, the Azov anchovy and other fish species migrate to the productive feeding areas of the Sea of Azov and return to the Black Sea in autumn followed by migratory harbour porpoises. The Taman Bay is an important habitat area for the coastal bottlenose dolphin population, numbering several hundred individuals. The IMMA includes the Ecologically or Biologically Significant Marine Area Taman Bay and Kerch Strait and the Cetacean Critical Habitat identified by the ACCOBAMS.

Kerch Strait and Taman Bay IMMA

Description

The Kerch Strait and Taman Bay are located between the Sea of Azov and the Black Sea. This IMMA has depths ranging from 1 m to 10 m in the north, and up to 30 m in the south. Taman Bay is a shallow semi-closed lagoon-type bay situated to the north of the Taman peninsula (between the Sea of Azov and the Black Sea). It opens to the Kerch Strait in the west. In the Kerch Strait salinity varies from 10‰ in the northern portion, up to 18‰ in the southern portion, and from 13-19‰ in Taman Bay. Taman Bay freezes during cold winters and remains open during mild winter conditions (Al'tman, 1991).

The Kerch Strait is a migration corridor connecting the Sea of Azov and the Black Sea (Fashchuk and Petrenko, 2008; Drozdov, 2011), thus making this IMMA critically important for the Black Sea harbour porpoise (*Phocoena phocoena relicta*) and the Black Sea bottlenose dolphin (*Tursiops truncatus ponticus*) (Fig. 2). A local coastal population of the Black Sea bottlenose dolphin is present during the summer season (Gladilina et al., 2018). Every spring, the harbour porpoises follow the fish migration into the Sea of Azov. Numerous porpoise bycatch and stranding cases are recorded from this area (Fig. 1) (BLASDOL, 1999; Gol'din, 2004; Birkun, 2006; Birkun and Krivokhizhin, 2011; Vishnyakova et al., 2013; Vishnyakova and Gol'din, 2016; Vishnyakova, 2017; Vishnyakova et al., 2017).

The Kerch Strait with its intensive international shipping has been designated as Cetacean Critical Habitat by ACCOBAMS (Notarbartolo di Sciara and Birkun, 2010) as the harbour porpoises enter through this narrow strait to feed in the Azov Sea and migrate from there to winter in the Black Sea. The proposed IMMA fully includes the Ecologically or Biologically Significant Marine Area Taman Bay and Kerch Strait.

Criterion A: Species or Population Vulnerability

The Kerch Strait and Taman Bay IMMA provides important habitat for the endangered Black Sea harbour porpoise (*Phocoena phocoena relicta*) listed as Endangered on the IUCN Red List (Birkun, 2002; 2003; Mikhalev, 2005; Birkun and Krivokhizhin, 2011; Savenko et al., 2013; Gol'din et al., in press; Öztürk et al., in press).

Criterion C: Key Life Cycle Attributes Sub-criterion C2: Feeding Areas

Kerch Strait and Taman Bay is an important area of fish aggregation and migration. Every spring, the Azov anchovy and other fish species migrate to the productive feeding areas of the Sea of Azov and return to the Black Sea in autumn followed by the harbour porpoises. The main fish species which inhabit the area during the warm season are 16 species of gobies, as well as anchovy, herrings, mullets, horse mackerel, red mullet, turbot, sprat, pike perch (Fashchuk and Petrenko, 2008; Drozdov, 2011). Most of them are on the list of primary prey species for the harbour porpoise, particularly gobies and anchovy (Zalkin, 1940; Vishnyakova et al., 2013). Consumption of these fish species was confirmed by their presence in stomach contents and by visual observations (Zalkin, 1940; Gladilina and Gol'din, 2014).

Criterion C: Key Life Cycle Attributes Sub-criterion C3: Migration Routes

The Kerch Strait is a migration corridor connecting the Sea of Azov and the Black Sea. Every spring the Azov anchovy and other fish species migrate to the productive feeding areas of the Sea of Azov and return to the Black Sea in autumn. The presence of migratory harbour porpoises was recorded during boat and coastal visual observations, passive acoustic monitoring with a C-POD detector and monitoring of stranding porpoises in 2007-2012 (Savenko et al., 2013; Vishnyakova et al., 2013). Autumn migration lasted between October and November, and spring

migration lasts between March and April. During the peaks of migration, aggregations of harbour porpoises reach a few thousand individuals. The Kerch Strait is an important wintering habitat and a foraging ground for harbour porpoises where the individuals of the Black Sea and Azov populations occur (Vishnyakova, 2017).



Figure 1: A Black Sea harbour porpoise caught in a fishing net. Photo courtesy Mare Nostrum by Costin Timofte.

Supporting Information

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Figure 2: A Black Sea bottlenose dolphin breaking the surface. Photo: Elena Gladilina.

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PDF made available for download at <https://www.marinemammalhabitat.org/wp-content/uploads/imma-factsheets/BlackandCaspianSeas/kerch-strait-and-taman-bay-BlackandCaspianSeas.pdf>.