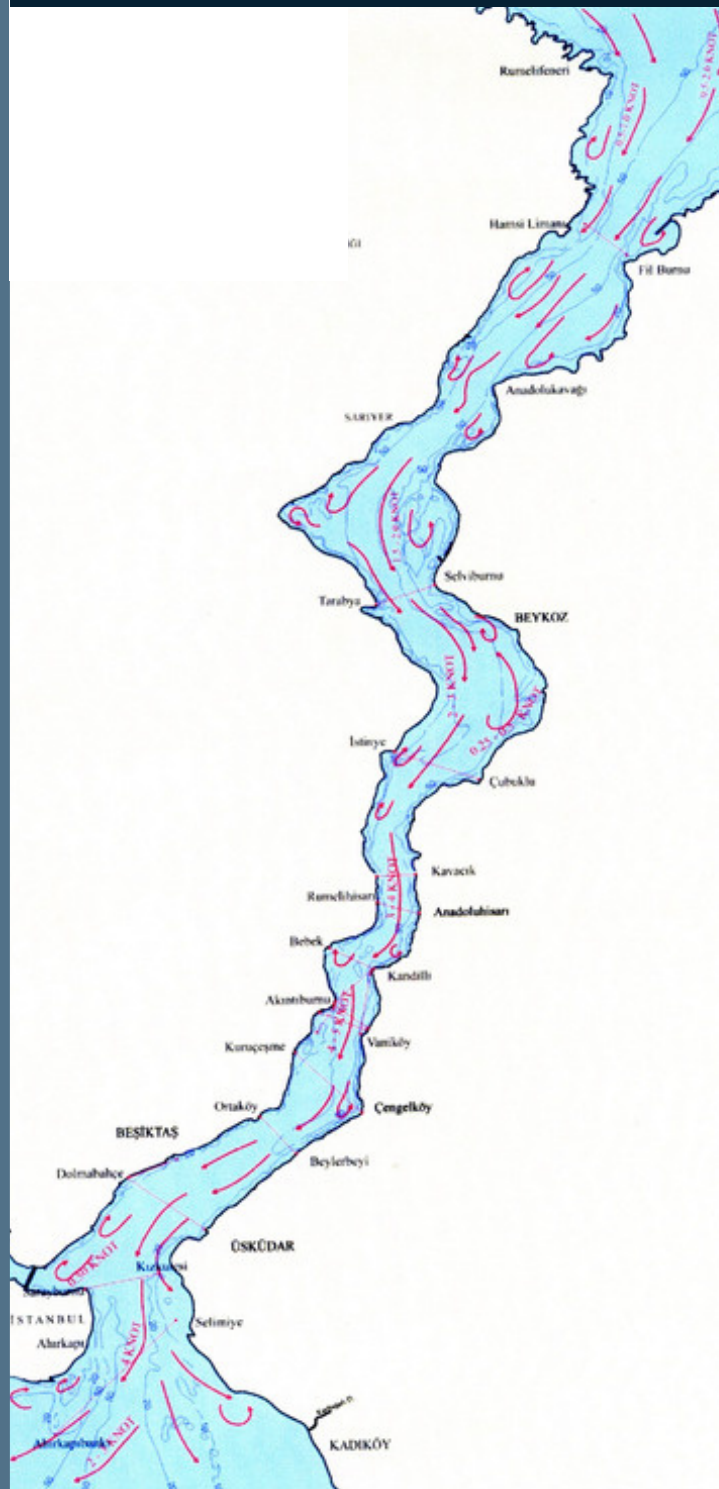




THE MARINE BIODIVERSITY OF THE ISTANBUL STRAIT IS UNDER THREAT!

The Istanbul Strait, which is called the Bosphorus in mythology, was a riverbed about 10,000 years ago. With the melting of glaciers and rising sea levels on the global scale, Mediterranean waters penetrated the Black Sea via the Çanakkale and Istanbul Strait. The Istanbul (Bosphorus) and the Çanakkale (Dardanelles) are known as the Turkish Straits. The Turkish Straits System includes Çanakkale (the Dardanelles), the Sea of Marmara and the Istanbul Strait (Bosphorus).

The Turkish Straits System is an inland waterway in terms of international maritime traffic and is located within Turkish territorial waters. Ships have the freedom of passage or *la liberte de passage et de navigation* in the Turkish Straits. This right is guaranteed by the Montreux Convention signed in 1936. The right of passage also includes the obligation to make innocent passage. The Istanbul Strait has strong currents. The upper current is towards the Marmara, the lower current is towards the Black Sea.



Due to its geographical location and oceanographic features, the Istanbul Strait acts as a biological corridor, barrier and acclimatization for the Black Sea and Mediterranean biota. It is an important area in terms of migration connectivity and marine biological diversity. The protection of the Istanbul Strait means the protection of the Black Sea, Marmara, and Aegean Seas.

THREATS

- **HEAVY MARINE TRAFFIC**
- **SHIP ACCIDENTS**
- **SHIP-ORIGINATED POLLUTION**
- **NOISE POLLUTION**
(EXAMPLE: SPEED BOATS)
- **NON INDIGENOUS & INVASIVE SPECIES**
- **LAND-BASED POLLUTION**
- **ILLEGAL FISHING & OVERFISHING**
(EXAMPLE: MUSSEL FISHING IS THREATENING THE BENTHIC ECOSYSTEM.)
- **CLIMATE CHANGE**
- **COASTAL DESTRUCTION**



Heavy maritime traffic increases the risk of maritime accidents. About 64,000 tons of oil were spilled to the sea in the 1979 tanker accident. In 1994, the NASSIA tanker accident occurred at the Black Sea entrance of the Istanbul Strait and 20,000 tons of oil spilled into the sea.

Alien species come to the Istanbul Strait by the ballast waters of ships, by sticking to their hulls or via the Suez Canal. ***Rapana venosa*** and ***Mnemiopsis leidyi*** are examples. Alien and invasive species pose a major threat to biodiversity. **Climate change and the increase in sea water temperature** facilitate the introduction of non-indigenous species.



The Istanbul Strait is home to algae, flowering plants (e.g. *Zoostera sp.*), invertebrates, fish, dolphins and seabirds. **The Mediterranean monk seal has disappeared.**



Tursiops truncatus
(Bottlenose Dolphin)



Puffinus yelkouan
(Yelkouan Shearwater)

Some migratory fish species from the Aegean Sea pass to the Black Sea to spawn in the spring. In autumn, they return to the Aegean Sea. Not only fish but also dolphins and birds migrate through the straits.



Phocoena phocoena relicta
(Harbour Porpoise)

Delphinus delphis
(Common Dolphin)

RECOMMENDATIONS FOR MEASURES

Fishing grounds in the Istanbul Strait should be rearranged. We recommend that ships be aware and careful that they enter a sensitive and special ecosystem in the Çanakkale Strait and at the mouth of the Black Sea while crossing the Marmara Sea. We also expect **the cooperation of shipping agencies** in this regard. Taking a pilot and following the **instructions of the Turkish Straits Ship Traffic Services Center** will reduce the risk of accidents. **Boats should reduce their speed,** safety of navigation and protection of the marine environment are complementary to each other.

- Domestic and foreign ships must strictly comply with the MARPOL 73/78 conventions rules. In addition, we recommend that the relevant institutions increase their inspections in the Istanbul Strait.
- The maximum safe navigation speed of ships in the Turkish Straits is 10 nautical miles. In particular, speed boats must comply with the speed rule and dolphins and other creatures should not be affected by such traffic.
- More efforts should be made by the relevant institutions for marine litter (especially plastics).
- Regular monitoring should be done for non indigenous species.
- Ships must discharge ballast water only in the permitted areas.
- Apart from the Istanbul Strait, studies should be started for the declaration of particularly sensitive sea areas in the Turkish part of the Black Sea.
- Untreated waste water should not be discharged from the land to the Istanbul Strait. Investments in treatment plants must be completed.

*Thank you for your support and assistance.
Let's remember again, the Istanbul Strait has very unique ecosystem and deserves full attention and protection.*

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