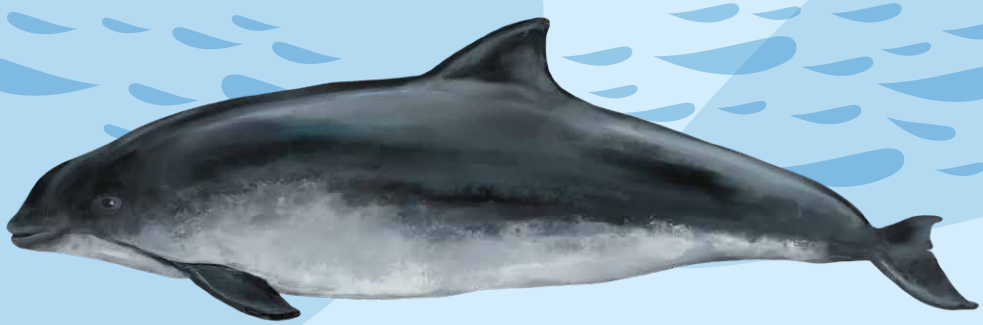
Food and Agriculture Organization of the United Nations

General Fisheries Commission for the Mediterranean

BlackSea4Fish

ACCOBAMS

Join the work towards cetacean-free turbot fisheries in the Black Sea



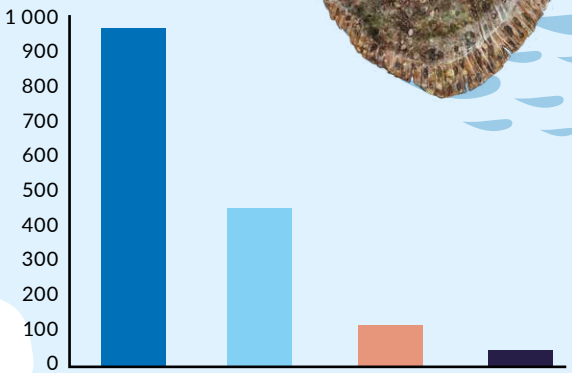
Play a part in CetaByM, our pilot project to assess cetacean bycatch in Black Sea turbot gillnet fisheries and to test measures to mitigate the incidental catch of cetaceans

Funded by the European Union

Turbot is one of the most valuable fish species in the Black Sea. Its fisheries are very important to local communities, primarily to small-scale fishers.

The overall Black Sea turbot fleet is **1 620** officially registered vessels*

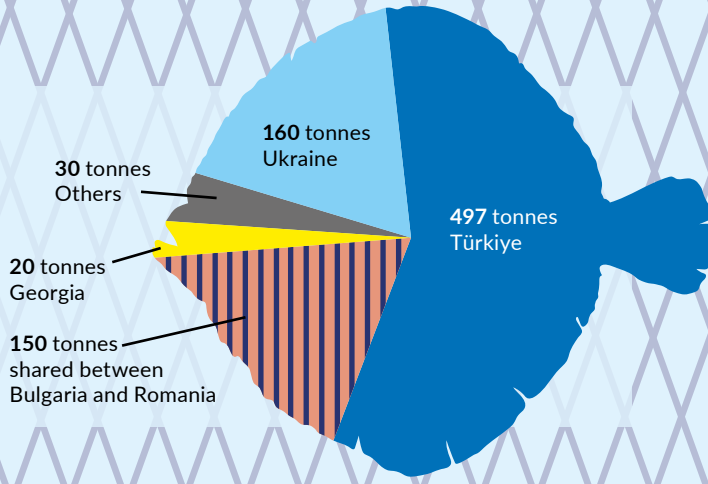
*2023 figures



The main gear used in turbot fisheries is gillnets with a legal mesh size of 400 mm.

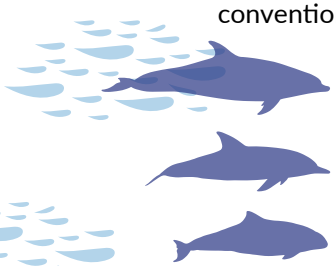
The Black Sea turbot stock is managed with a quota system

In 2022, the overall quota was **857** tonnes:



Cetacean species in the Black Sea

There are three species of cetaceans in the Black Sea basin, all of which are protected under several national and international laws and conventions:



- the common bottlenose dolphin (*Tursiops truncatus ponticus*);
- the short-beaked common dolphin (*Delphinus delphis ponticus*); and
- the harbour porpoise (*Phocoena phocoena relicta*).

As top predators they keep fish populations healthy by feeding on the weakest and smallest individuals.

Harbour porpoise

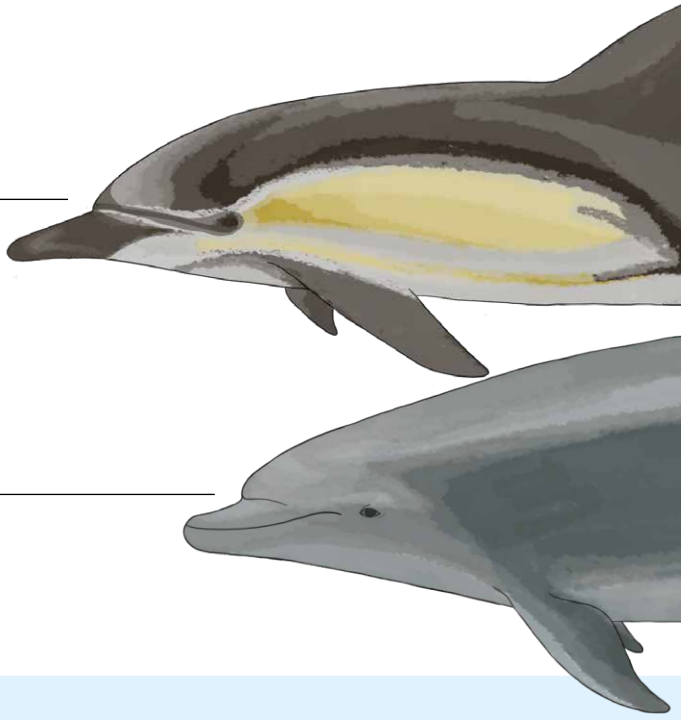
It has a mean body length of 130 to 150 cm and a mean weight of 30 to 45 kg.

Short-beaked common dolphin

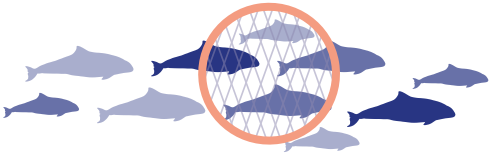
It has a body length of 180 to 250 cm and weighs from 70 to 130 kg.

Common bottlenose dolphin

It has a body length of 240 cm and weighs from 150 to 300 kg.



In a 2019 study:

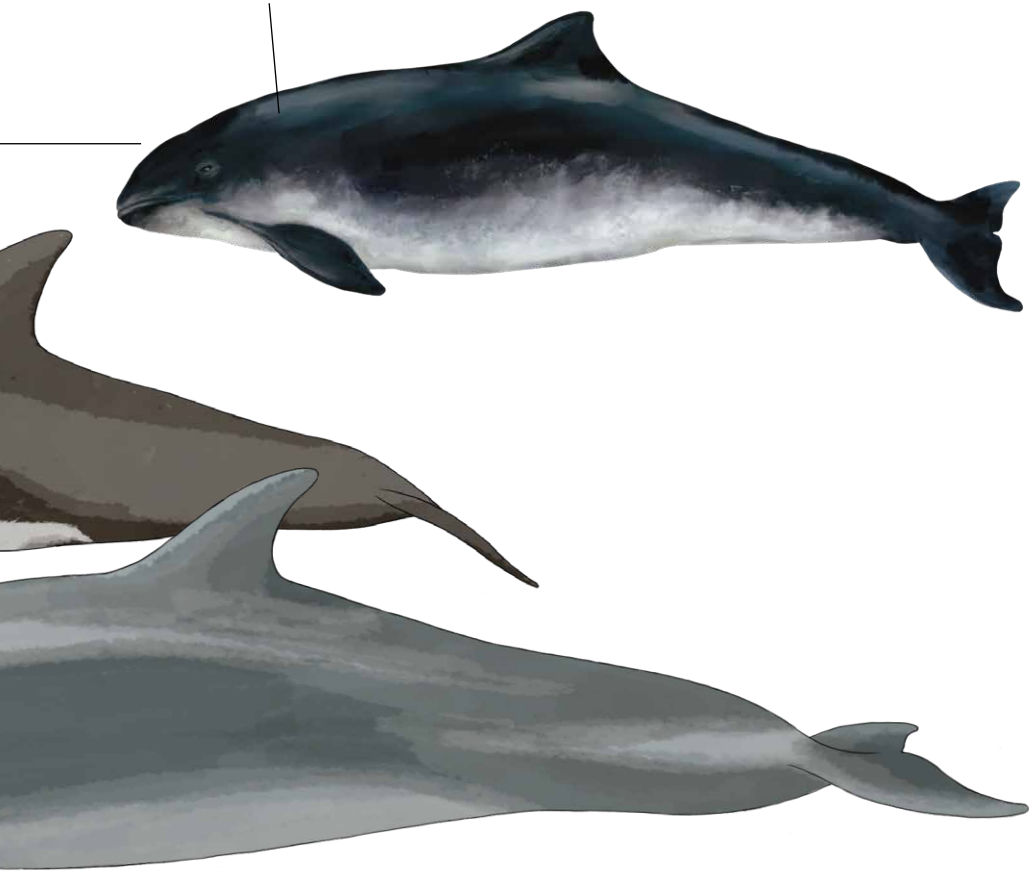


Its Black Sea population was estimated at about 94 000 individuals.

The total annual Black Sea bycatch of harbour porpoise was estimated to be between 12 000 and 20 000 individuals.

This gives an annual bycatch mortality value of at least 4.7 percent of the total harbour porpoise population, the highest bycatch level in the world.

The harbour porpoise is the smallest cetacean species in the Black Sea.



Cetaceans and the turbot gillnet fisheries: interactions and mitigation measures

Unlike the other two species of dolphins in the Black Sea, the harbour porpoise is unable to detect turbot gillnets at a distance. By the time it does, it is usually too late to avoid the net and it becomes entangled. This is why so many harbour porpoises are drowned by turbot gillnets. In addition, these nets typically stay in the water one to two weeks, or sometimes even more. The longer the soaking time, the higher the number of bycaught porpoises.

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Studies suggest high harbour porpoise mortality levels and relevant authorities have been asked to develop and apply measures to reduce bycatch levels.

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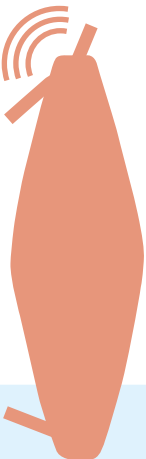
Researchers are investigating ways of reducing the bycatch of harbour porpoises under the BlackSea4Fish project.



Porpoise alerting devices (PALs) have already been successfully used in the North Sea and the Baltic Sea, and they are now being tested in selected Black Sea gillnet fisheries. The PAL imitates harbour porpoise communication signals, at a frequency of 10 to 130 kHz, causing them to increase their echolocation activity – and this improves their ability to detect and avoid the nets.

We need your help!

The cetacean bycatch reduction in Black Sea turbot gillnet fisheries project is vital for the sustainability of this fishery, but to succeed it needs support from fishers, and it needs their unique knowledge and experience too. If you have views to share – observations on the current turbot fishery and how to improve it, information on bycatch levels, ideas for reducing the numbers of porpoises caught, etc. – then you have a part to play and we want to hear from you. Please get in touch today.

You can reach us by email at BlackSea4Fish@gfcmonline.org

The General Fisheries Commission for the Mediterranean, BlackSea4Fish and CetaByM

The General Fisheries Commission for the Mediterranean (GFCM) manages fisheries in the Mediterranean and the Black Sea. Comprising 22 member countries and the European Union, its main goal is to ensure the **conservation and sustainable use of marine living resources** in the Mediterranean and the Black Sea.

In 2016, the GFCM launched **BlackSea4Fish**, a project to provide scientific and technical support for the sustainable management of Black Sea fisheries.

The pilot project CetaByM, which aims to assess cetacean bycatch in Black Sea turbot gillnet fisheries and to test measures to mitigate the incidental catch of cetaceans, is carried out in partnership with the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS), whose main purpose is to reduce threats to cetaceans, notably by improving current knowledge on these animals.

On the field, CetaByM is being run in cooperation with the National Institute for Marine Research and Development (NIMRD) and the National Agency for Fisheries and Aquaculture (NAFA) from Romania, the Central Fisheries Research Institute (SUMAE) and the General Directorate of Fisheries and Aquaculture (BSGM) from Türkiye, the National Environment Agency (NEA) and the Ministry of Environment and Natural Resources Protection from Georgia, and the Executive Agency of Fisheries and Aquaculture (EAFA) from Bulgaria, under the supervision of the GFCM Black Sea Technical Unit. Observers from the non-governmental organization Mare Nostrum, Romania, as well as the non-governmental organization GreenBalkans, Bulgaria, also support the project.