

Executive Summary



Many of the cetaceans (whales, dolphins and porpoises) living in European waters¹ are facing an uncertain future, despite being included in a wealth of international agreements, conventions and regulations which should be providing them with adequate protection. Indeed, cetaceans are, in theory, among the most protected wildlife in Europe but the reality is that they are facing many challenges, both as individuals, when all too often their health and welfare is being adversely impacted, and also as populations.

OceanCare's "UNDER PRESSURE. The need to protect whales and dolphins in European waters" report brings together leading experts on key issues and builds on robust scientific knowledge to provide governments, conventions, international fora, Multilateral Environmental Agreements (MEAs) and decision-makers with the information and recommendations needed to further the protection of cetaceans.

Firstly, this report provides an up-to-date assessment of the status of the 33 cetacean species regularly occurring in European waters. Secondly, it considers the various threats that they are facing and their legal standing. The expert reviews show that:

- European waters are home to a wide diversity of cetacean species, including the largest animals ever to have lived on Earth (the blue whale, *Balaenoptera musculus*, and the fin whale, *Balaenoptera physalus*), the deepest diving whales (the sperm whale, *Physeter macrocephalus*, and several beaked whale species), wide-ranging species that live in the open oceans, and populations found in discrete ranges nearshore. This diversity of species and habitats implies that, while some threats affect many of them, no single conservation regime will fit all and conservation efforts have to take into account the biology and needs of each population, as well as local circumstances.
- Some populations of European cetaceans need to have their conservation status updated and others still need to be assessed for the first time. As scientists have become aware of new distinct populations, all too often it has simultaneously become apparent that these populations are threatened. This has been the case, for example, with the orca (*Orcinus orca*) population in the Strait of Gibraltar, which was recently recognised as a discrete entity and immediately designated as Critically Endangered.
- Despite recognising the threats facing cetaceans, some northern European countries still hunt these marine mammals for reasons that are clearly commercial, or in the context of "subsistence" hunting. Surprisingly high numbers of animals are killed: over 50,000 whales, dolphins and porpoises were killed by Greenland, Iceland, Norway and the Faroe Islands between 2010 and 2020. These takes substantially undermine the conservation initiatives undertaken by other European countries, and, in the case of Norway, defy the global moratorium on commercial whaling. More often than not, hunting does not take into consideration that targeted species are facing a number of other threats, and that direct takes may expose some populations to unnecessary and unsustainable pressure. Beyond the killing and removal of individuals, such hunts can also negatively impact the welfare, reproductive potential and social organisation of the populations that the animals are taken from.
- Bycatch (the incidental capture of cetaceans in fishing operations) is highlighted as an extremely serious threat, with thousands of cetaceans dying in both legal and illegal fishing nets throughout European waters each year. Activities aimed at reducing or ending bycatch are not fully developed or implemented across Europe. Advice from the International Council for the Exploration of the Sea (ICES) regarding fisheries closures and the use of acoustic deterrent devices needs to be closely followed to attempt to reduce bycatch of populations at particular risk such as the harbour porpoise (*Phocoena phocoena*) in the Baltic Sea. It is imperative that bycatch is monitored and that concerted actions are taken immediately to end it. Entanglement of cetaceans is also a significant welfare issue, with some of the largest cetaceans, for example, capable of dragging fishing gear away and then being subject to a very slow and painful death. The removal of ghost nets and the prevention of illegal drift net fishing are high priorities.

¹ The term "European waters" is used here to include the marine territories of the states that belong to the European Union and those European nations that do not belong to the European Union.

- Other significant threats that are reviewed by experts in this report include noise, chemical and plastic pollution, ocean warming and ocean acidification. All of these require action including, for example, banning oil and gas exploration activities, limiting ship speeds, ensuring the safe disposal of chemical pollutants, preventing plastics from entering the marine environment and reducing our consumption of fossil fuels.
- This report also covers the current legal protection of cetaceans, including in European Union legislation such as the Habitats Directive and the Marine Strategy Framework Directive (MSFD), as well as international and regional conventions which seek to tackle bycatch, illegal hunting and trade, with the aim of ensuring a good environmental status. These regulations include two regional agreements focused exclusively on cetaceans, i.e. ASCOBANS (to protect small cetaceans in the North and Baltic Seas) and ACCOBAMS (protecting all cetaceans in the Mediterranean, Black Sea and adjacent waters). The various chapters focused on specific threats also detail some of the relevant transnational legal approaches in place².
- The benefits of Marine Protected Areas (MPAs) for cetacean conservation are also emphasized, including the importance of carefully choosing such sites to genuinely protect species and habitats. However, within Europe, countries have differed in their approaches to establishing MPAs and cetaceans are sometimes still not sufficiently protected even within the areas designated for them.
- One chapter highlights that valuable information regarding cetacean health can be derived from stranded animals, e.g. based on the assessment of pathogens and chemical pollutants. It is essential that all countries have well-managed stranding networks which allow for postmortems to be carried out following established protocols. Stranding networks are also useful for gathering data relating to bycatch in fishing gear.
- Whale and dolphin watching has been promoted as a way of encouraging countries to value their cetacean populations, as opposed to hunting them. One of the chapters in this report focuses on the pros and cons of this form of nature tourism. In some areas, failure to regulate the whale watching industry has put certain cetacean populations at risk from increased disturbance and boat traffic, which can negatively affect cetacean behaviour and, sometimes, results in displacement. Whale and dolphin watching should also incorporate education, science and conservation components.
- Europe's whales, dolphins and porpoises are heavily exposed to chronic and acute noise pollution emanating from shipping, construction, oil and gas exploration, naval activities and other sources, and this can have physical and behavioural impacts on them. In some cases, noise has resulted in mass mortality of cetaceans.
- Chemical pollutants can suppress cetacean immune systems, making them more vulnerable to infectious diseases, and can also negatively impact their reproduction. Although some chemical pollutants in Europe have declined or are declining, polychlorinated biphenyls (PCBs) are still found at very high levels in some cetacean populations, and new toxic compounds are taking the place of banned contaminants.
- The Mediterranean Sea and parts of the Greenland and Barents Seas are hotspots for plastic debris, including macro and microplastics. The Mediterranean Sea has been identified as a "great accumulation zone of plastic debris" where the average density of plastic is comparable to that described for the five other marine gyres, with a high ratio of microplastic abundance to plankton abundance. Cetaceans that ingest or become entangled in plastic debris may suffer long-term negative impacts or succumb to injuries. Reducing the amount of plastic debris in European waters as well as removing ghost nets and other discarded fishing gear can contribute to cetacean conservation.
- Climate breakdown is an extremely challenging threat for all marine diversity including cetaceans. The final part of this report focuses on how raising ocean temperatures and the related issue of ocean acidification are affecting cetaceans in European waters. Direct impacts include thermal stress, while indirect impacts concern changes

² As a disclaimer, we note that a review of all the existing legislation of European states was not within the scope of this report.

in prey availability or distribution. Climate change has the potential to affect migration patterns and seasonality of breeding, while also increasing the occurrence of epizootics. While some species may be able to adapt, for example by changing their distribution, others may not. Subpopulations of cetaceans living in enclosed basins such as the Black Sea may be at higher risk. The phasing out of hydrocarbon exploration projects would not only help tackle climate change, but also eliminate one of the most severe sources of man-made noise in European waters.

Through the lens of expert opinions, the report shows that European cetaceans occur in habitats that are far from pristine. They are exposed to multiple stressors with potentially synergistic effects.

Despite cetaceans being the focus of extensive and progressive legal frameworks and being among the most protected wildlife “on paper”, the report clearly reveals the need to take urgent actions, exposing many severe risks that could cause further deterioration to whale, dolphin and porpoise populations. Coordination, implementation and enforcement of existing legislation and conservation provisions are challenges which need to be addressed immediately. This leads to the conclusion that we have to act in a swifter, more precautionary and more joined-up manner if we want to conserve Europe’s cetaceans whilst simultaneously protecting their health and welfare.