



Marine mammals and sea turtles of the **Mediterranean and Black Seas**





MEDITERRANEAN AND BLACK SEA BASINS

Main seas, straits and gulfs in the Mediterranean and Black Sea basins, together with locations mentioned in the text for the distribution of marine mammals and sea turtles





**Marine mammals and
sea turtles of
the Mediterranean
and Black Seas**

Compiled by
María del Mar Otero and Michela Conigliaro

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Published by

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Citation

IUCN (2012). *Marine Mammals and Sea Turtles of the Mediterranean and Black Seas*. Gland, Switzerland and Malaga, Spain: IUCN. 32 pages.

ISBN 978-2-8317-1478-3

Cover illustration Sperm whale *Physeter macrocephalus flukes* by Jessica Sánchez

Layout by Factor Ñ

Produced by IUCN Centre for Mediterranean Cooperation

Printed by Solprint, Mijas (Malaga), Spain

Available from

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Malaga, Spain
Tel: +34 952 028430 - Fax: +34 952 028145
www.iucn.org/mediterranean

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Nature) Publications Services
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Acknowledgements

The Mediterranean cetacean assessment received extensive expert advice and assistance from ACCOBAMS and the IUCN Cetacean Specialist Group. All the assessments submitted for inclusion in the IUCN Red List since 2000 have been peer-reviewed by the appointed Red List Authorities. We thank the following experts for their valuable help in reviewing the assessments: William F. Perrin, Barbara L. Taylor, Randall Reeves, Giuseppe Notarbartolo di Sciara, Robert L. Brownell and Brian D. Smith.

We would also like to thank the following experts who additionally contributed to the regional assessments of the Mediterranean cetacean species included in this booklet: Alexei Birkun Jr., Greg Donovan, Caterina Maria Fortuna, Philip Hammond and Renaud de Stephanis.

William F. Perrin and Giuseppe Notarbartolo di Sciara (IUCN Cetacean Specialist Group), Kit Kovacs and Alexandros A. Karamanlidis (IUCN Pinniped Specialist Group) and Nicolas Pilcher and Paolo Casale (IUCN Marine Turtle Specialist Group) also made valuable comments.

We are particularly grateful to Dania Abdul Malak for her preliminary work which made it possible to produce this booklet and to Craig Hilton-Taylor, Jean-Cristophe Vié and Lynne Labanne for their useful comments on this publication. Additionally, our thanks go to Chris Tribe and Violeta Barrios, who edited the document, Yichuan Shi and Olga Lucía Hernández, who produced the maps.

This booklet has been produced by the IUCN Centre for Mediterranean Cooperation in collaboration with the IUCN Species Survival Commission (SSC) and the IUCN Species Programme.

Financial support for the Mediterranean cetacean assessment and this booklet was provided by the MAVA Foundation and the Spanish Agency for International Development Cooperation (AECID).



Introduction

IUCN—International Union for Conservation of Nature—is the world’s oldest and largest global environmental network, with more than 1,200 governmental and non-governmental member organizations and almost 11,000 volunteer scientists in more than 160 countries. It provides world-leading expertise on species assessment and the only globally accepted methodology for measuring the conservation status of the world’s species, through the *IUCN Red List Assessment of Threatened Species™* (IUCN Red List). Knowing the conservation status of species is a basic requirement for developing significant political measures for biodiversity conservation.

The IUCN Red List assesses individual species according to a set of criteria and classes them in different categories according to their relative probability of risk of extinction (IUCN, 2001). All species fall into one of nine categories: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD) and Not Evaluated (NE) (see page 26).

The Red List Assessment is conducted at both global and regional levels. Global status refers to the status of a particular species worldwide, and regional status describes a species’ likelihood of extinction in a particular region (i.e. the Mediterranean Region or the Black Sea Region). Due to the different scale of analysis, the same species can be assigned to different categories, so that a species listed as not threatened at global level could be listed as threatened at regional level, and vice versa.

This booklet presents information on the conservation status of the marine mammals and sea turtles that inhabit the Mediterranean and Black Seas. Each species has previously been classified by IUCN at global level and here we present the first results of the regional assessment for those cetacean species resident in the Mediterranean Sea. It also focuses on the main threats that affect their survival and growth and makes recommendations to better preserve them. It presents brief details on resident species

(those recorded all year round and breeding in the region), visitor species (scarcer but occurring regularly every year) and vagrant species (rare and unexpected ones that do not occur annually).

The information presented in this document is compiled from the Mediterranean Red List assessment of resident cetacean species first produced by a group of cetacean experts in Monaco in March 2006 and later updated in 2010. This work was carried out in collaboration with ACCOBAMS—the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area—and the IUCN Cetacean Specialist Group. As a result of this work, a Red List Category has been assigned to each cetacean species.

This booklet also summarizes the current global status of visitor and vagrant cetaceans in the Mediterranean and the status of the endemic cetacean species in the Black Sea, the conservation status of the only Mediterranean seal species (from the most recent assessment in 2008; IUCN Pinniped Specialist Group), and the latest information available on marine turtles, published in 2010 (Casale and Margaritoulis). Basic information is still lacking for some species (e.g. *Ziphius cavirostris*) and the on-going data compilation will contribute to their future conservation assessment. Finally, a reference list is provided of the most important publications relating to this fauna and its conservation.

THE MEDITERRANEAN AND BLACK SEAS

The Mediterranean is a semi-enclosed sea with diverse oceanographic dynamics and water circulation patterns (such as gyres, upwellings and fronts), which result in surges of biological productivity in different places and at different times. Its rich and unique biodiversity has led to its recognition as one of the most important biodiversity hotspots in the world. The seafloor drops from extensive seagrass beds, rocky shores and sandy beaches to the

continental slope and steep underwater geological structures such as submarine canyons, seamounts, mud volcanoes, cold seeps, and trenches more than 5,000 m deep. This range of features supports high concentrations and a great diversity of marine wildlife, including marine mammals and sea turtles that live in and migrate through the sea. It is divided into two main basins, the Western and the Eastern Mediterranean, connected by the Strait of Sicily. From west to east, the Alboran sea, Algerian-Provençal basin, Tyrrhenian sea, Adriatic sea, Tunisian Plateau/Gulf of Sirte, Ionian sea, Aegean sea and Levantine sea constitute the Mediterranean (see map on inside front cover). The Strait of Gibraltar, the gate to the Mediterranean, was not considered part of the Mediterranean for this assessment.

The Black Sea marine ecosystem structure is different in that it is more isolated, with connections only to the Sea of Azov through the Kerch Strait and to the Mediterranean and the Sea of Marmara through the Bosphorus. The seabed is divided into the shelf, which holds the greatest abundance and diversity of species, and the continental slope and deep sea depression, where unique hydrochemical conditions transform the seawater characteristics below a depth of 150 m down to the deepest parts at 2,200 m below the surface.

Several factors determine the geographical distribution of marine mammals and sea turtles in both seas. Ocean currents, abundance of food, sea temperature, morphology of the coastline, seabed topography, as well as human activities, seem to interact and influence which areas are preferred habitats for cetaceans, sea turtles and seals. Certain habitats have a particular key value in the life cycles of different species, in that they are used for breeding, as nursery grounds, for refuge, for overwintering or as good foraging grounds due to prey abundance.



Conservation status and distribution of marine mammals



Cetaceans

Cetaceans are a group of marine mammals that includes whales, dolphins and porpoises. There are approximately 87 living species divided into two major groups: the baleen whales (Mysticeti) and the toothed whales (Odontoceti). Baleen whales are among the largest animals on earth. They have baleen plates (sieve-like structures in the mouth) instead of teeth, which they use to filter small food items such as krill, herrings and crustaceans from the seawater, and two blowholes (nostrils). In contrast, toothed whales have a single blowhole and teeth that they use to catch larger animals such as squid and fish.

At present, 21 different cetacean species and three subspecies have been sighted in the Mediterranean and Black Seas. Eight of these have

resident populations in the Mediterranean Sea, the three subspecies are endemic to the Black Sea (i.e. not found anywhere else in the world) and 12 are visitors and appear in these seas from time to time. Scientists also believe that some of the resident species may have evolved into genetically distinct subpopulations.

Whales and dolphins are mammals in that they breathe air, give birth to live young (not hatched from eggs), nurse their calves with milk, and are warm-blooded. They may segregate into groups according to sex and age or live alone for most of the time. Some species migrate long distances to reach good feeding grounds, to breed and nurse their calves or to overwinter in certain areas. They make a wide array of sounds for communication and echo-

location, enabling them to navigate, identify prey and other cetaceans, and avoid predators.

Despite their popularity, little is known about many cetacean species. On the following pages we present the results of the assessment of the conservation status of the cetaceans resident in the Mediterranean Sea as well as those from the Black Sea and their status at global level. We also include a brief description of the main distinguishing features of each species as well as the main threats to their survival to help explain their importance and uniqueness. To accompany the Red List regional assessment, the geographical distribution of each of the resident cetacean species is mapped to show where it occurs most frequently.



Pinnipeds

Seals, sea lions and walrus form the group of marine mammals known as Pinnipeds. All of them share certain physical characteristics: a hydrodynamic body shape that helps them to move in the water, a thick layer of fat, and fur covering their body. They have a pair of front flippers and a pair of rear flippers forming a tail-like structure, which helps them move on land and swim in the sea.

Seals also have other features that make them well adapted to their particular lifestyle, such as whiskers on their faces and very sensitive ears that help them to locate prey and recognize their offspring. True seals (also called earless seals) are the most diverse and widespread of all the pinniped species and the most highly adapted to aquatic life. They can be found worldwide from the cold waters of the

Arctic and Antarctic to the warm tropical waters of the Equator. True seals are usually found in areas where there is little human disturbance, hauling out on ice packs, beaches, bays and shoreline rocks where food (fish, squid, shellfish and crustaceans) is abundant. Some seal species are very social and live in large groups while others, like the Mediterranean Monk Seal, have a more solitary lifestyle. Mating takes place either on land or in the water. Females normally give birth to a single offspring, or pup, which feeds on its mother's milk for the first month of life. Pup survival is therefore strictly dependent on female survival and is generally quite low. In many cases under 50% of the pups survive their first two months. Seals also face a variety of threats throughout their lives, including food shortages, shark predation, deliberate killing by humans and

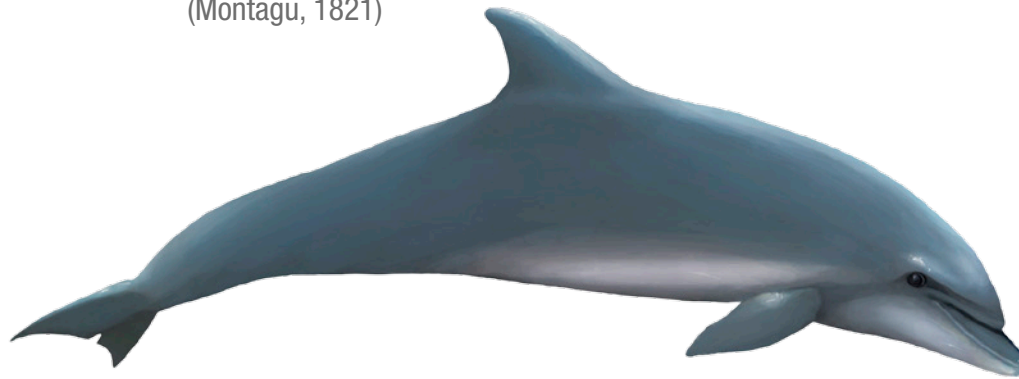
accidental entanglement in fishing gear or marine debris, as well as a reduction in suitable habitat as a result of human development.

Nineteen species and several subspecies of seals in this group are recognized worldwide. They include the monk seals, of which only two species remain: the Hawaiian Monk Seal, *Monachus schauinslandi* and the Mediterranean Monk Seal, *Monachus monachus*. The Mediterranean Monk Seal is the only pinniped species inhabiting the Mediterranean region. This booklet presents some facts about the species and its conservation status according to the last review conducted by the IUCN Pinniped Specialist Group.



Common Bottlenose Dolphin

Tursiops truncatus
(Montagu, 1821)



BRIEF DESCRIPTION

Bottlenose Dolphins are probably the most familiar of the small cetaceans in the Mediterranean. These dolphins usually live in small groups of 2–15 individuals, although larger groups have been reported on occasion, especially offshore. They occur in marine and estuarine waters including inland deltas, subtidal aquatic beds, and brackish and saline lagoons. The range of habitats used by Bottlenose Dolphins includes inshore, coastal and offshore waters as far as the continental slope throughout the Mediterranean Sea.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

There is no overall estimate of the Mediterranean population. Little information exists on the distribution and abundance of Common Bottlenose Dolphin in the eastern and southern parts of the Mediterranean basin. The total Mediterranean population may be in the low 10,000s,

based on reliable estimates in areas that have been surveyed by experts. An overall decline in the population seems likely, however, as in those regions where regular monitoring takes place there has been a steady decrease in numbers in the areas where they are observed as well as reductions in their range and abundance (possibly by more than 30% since 1940).

In the Adriatic Sea, for example, the population of Common Bottlenose Dolphin is considered to have declined by at least 50% over the last 50 years as a consequence of past killing by the fishing industry and reduced food availability caused by overfishing and environmental degradation. Other major threats that currently put the survival of the species at risk are entanglement in fishing gear and the accumulation of toxins in their bodies from chemical pollution.

IUCN RED LIST

Mediterranean status: Vulnerable

Global status: Least Concern



COMMON BOTTLENOSE DOLPHINS ARE FOUND ALONG MANY PARTS OF THE MEDITERRANEAN COAST (SEE HATCHED AREA ON MAP), WHERE THEY ARE THREATENED BY COMPETITION WITH COMMERCIAL FISHERIES, BY-CATCH IN DRIFTNETS AND WATER POLLUTION

Common Bottlenose Dolphin

Tursiops truncatus



Average adult length 2–3.8 m

TAXONOMIC CLASSIFICATION

Class: Mammalia

Order: Cetartiodactyla

Cetacea (unranked)

Odontoceti (unranked)

Family: Delphinidae

Genus: *Tursiops*

Species: *truncatus*

CURIOSITIES

Bottlenose Dolphins in coastal waters are frequently seen following trawlers, around fish farm cages or taking fish from gillnets.

CAN BE CONFUSED WITH...

Risso's Dolphin [p. 11]



BUT...

- Forehead distinctly separated from the snout by a crease
- Dorsal fin less sickle-shaped
- Absence of scratch marks on the body
- Darker dorsal colour



Cuvier's Beaked Whale

Ziphius cavirostris
G. Cuvier, 1823



BRIEF DESCRIPTION

Cuvier's Beaked Whale is a predominantly oceanic species that moves in groups of at least 2-3 individuals. It prefers offshore areas containing submarine canyons, seamounts and escarpments, where it can feed on its preferred diet of deep-sea squid and some fish. This species is characterized by its stout body and small sloping head with a short beak and curved mouth giving this whale its characteristic S-shaped grin. Adults' bodies are generally covered with scratches, probably due to aggression during the mating season.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

Although relatively common in some areas, little is known about this species and much of our current information is from strandings (animals found on the shore). The main areas of particular concern—the eastern Ligurian Sea, the eastern Alboran Sea and the Hellenic Trench—relate to

those sites where they have been found regularly. The Genoa canyons in the western Ligurian Sea, for example, seem to attract the whales because of the high productivity of deep-sea squid in the area.

Cuvier's Beaked Whales are very vulnerable to underwater noise produced by military and seismic exploration sonar, which affects the whales' communication and orientation. Mortalities also occur from ingestion of plastic debris and occasional by-catch in fishing driftnets.

IUCN RED LIST

Mediterranean status: Data Deficient

Global status: Least Concern



THESE RARELY SEEN WHALES OF DEEP, OPEN WATERS ARE SIGHTED MOST OFTEN IN CERTAIN AREAS OF THE MEDITERRANEAN (SEE HATCHED AREA ON MAP). THIS SPECIES IS CRITICALLY AFFECTED BY HUMAN IMPACTS ON THE SEA, SUCH AS LITTER (WHICH IT SWALLOWS), UNDERWATER MINERAL PROSPECTING AND MILITARY SONAR

Cuvier's Beaked Whale

Ziphius cavirostris



Average adult length less than 7 m

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)
Family: Ziphiidae
Genus: *Ziphius*
Species: *cavirostris*

CURIOSITIES

Adult male Cuvier's Beaked Whales have a pair of teeth at the tip of the lower jaw. They are thought to be used during contests over females during the mating season. The males' bodies are covered with scratches.

CAN BE CONFUSED WITH...

Blainville's Beaked Whale [p. 19]



Gervais' Beaked Whale [p. 19]



BUT...

- Stouter body
- Shorter beak
- Blunter head
- Lighter body colour
- Males with pale areas on the belly and head



Fin Whale

Balaenoptera physalus
(Linnaeus, 1758)



BRIEF DESCRIPTION

The Fin Whale is the most common large whale species in the Mediterranean Sea and the second largest animal on earth (after the Blue Whale), with adults reaching lengths of up to 25 m and weights of up to 85 t. In spite of their size, they are fast-moving animals, swimming at speeds of up to 50 km per hour. Fin Whales usually live in small groups, but occasionally form schools of hundreds of individuals, especially in productive areas on the high seas, where they feed mainly on small shrimp-like creatures called krill and schooling fish. Their distribution in the western and central Mediterranean Sea is believed to be related to water depth and circulation patterns, affecting the presence of their prey.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

The species occurs mostly in deep offshore waters from north-east of the Balearic Islands to the Ionian Sea. It is particularly abundant in the Corso-Ligurian Basin and

Gulf of Lion. Its current population in the Mediterranean is believed to be close to 5,000 adults. The Pelagos Sanctuary, the largest marine protected area for Mediterranean marine mammals, situated between Italy, France and the island of Sardinia, has witnessed a dramatic decline in Fin Whales, from 900 individuals reported in 1992 to only 147 in 2009. They are also known to congregate in late February and early March in the coastal waters off the island of Lampedusa (Italy), in the Strait of Sicily, to feed mostly on the krill species *Nyctiphanes couchii*, a small crustacean. Fin Whales may fall victim to ship strikes, particularly from high-speed ferries. Further threats include high levels of DDT (an organochlorine insecticide) in their tissues, which can affect their reproduction and immune system, possibly unregulated whale watching, and acoustic disturbance from seismic surveys.

IUCN RED LIST

Mediterranean status: Vulnerable

Global status: Endangered



FOUND MOST COMMONLY IN OFFSHORE DEEP WATERS IN THE WESTERN AND CENTRAL MEDITERRANEAN (SEE HATCHED AREA ON MAP). THE BIGGEST THREATS TO FIN WHALES ARE BY-CATCH IN FISHING NETS, DISTURBANCE BY RECREATIONAL VESSELS AND NOISE FROM SHIPPING

Fin Whale

Balaenoptera physalus



Average adult length 13–19 m

TAXONOMIC CLASSIFICATION

Class: Mammalia

Order: Cetartiodactyla

Cetacea (unranked)

Mysticeti (unranked)

Family: Balaenopteridae

Genus: *Balaenoptera*

Species: *physalus*

CURIOSITIES

The throat of Fin Whales can expand enormously during feeding to engulf a huge mouthful of water and filter out food consisting of tiny crustaceans and fishes.

CAN BE CONFUSED WITH...

Sei Whale [p. 17]



BUT...

- Characteristic light grey V-shaped patch behind the head
- Left side of lower jaw is dark and right side is white



Long-finned Pilot Whale

Globicephala melas
(Traill, 1809)



BRIEF DESCRIPTION

Long-finned Pilot Whales are among the largest members of the dolphin family, and are commonly seen in tight, sociable groups of 9–23 individuals exhibiting similar social behaviour to Killer Whales. Their globose head, long flippers and white anchor-shaped patch on the chest make them easily identifiable. They feed offshore on deep-sea squid, other cephalopods and small pelagic fish using echolocation tactics to help them find food.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

The known areas of special concern for this species are in the western Mediterranean Sea, including the Strait of Gibraltar. The subpopulation of Mediterranean Long-finned Pilot Whales is especially common in the waters of the Alboran Sea, where there are possibly several

hundred to a few thousand individuals. However, the only available estimate of abundance is for a potentially resident group of 260–270 individuals in the Strait of Gibraltar (1999–2005).

The main threats to Long-finned Pilot Whales include mortality as a result of by-catch in commercial fisheries, collisions with ships, man-made noises such as sonar that interfere with their central nervous system causing neurological disorders, harassment by people during whale watching, and the toxic effects of chemical pollution.

IUCN RED LIST

Mediterranean status: Data Deficient

Global status: Data Deficient



COMMON IN THE WESTERN MEDITERRANEAN (SEE HATCHED AREA ON MAP), ESPECIALLY IN THE ALBORAN SEA. PILOT WHALES ARE THREATENED BY MARITIME TRAFFIC DISTURBANCE, FISHING ACTIVITIES, POLLUTION AND HIGH-INTENSITY UNDERWATER NOISE FROM NAVAL SONAR AND SEISMIC EXPLORATION

Long-finned Pilot Whale

Globicephala melas



Average adult length 5–7 m

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)
Family: **Delphinidae**
Genus: ***Globicephala***
Species: ***melas***

CURIOSITIES

These dolphins have strong family bonds: when an animal dies or falls ill, the rest of the group tends to follow it. That is why mass strandings on the shore are so common for this species.

CAN BE CONFUSED WITH...

False Killer Whale [p. 16]



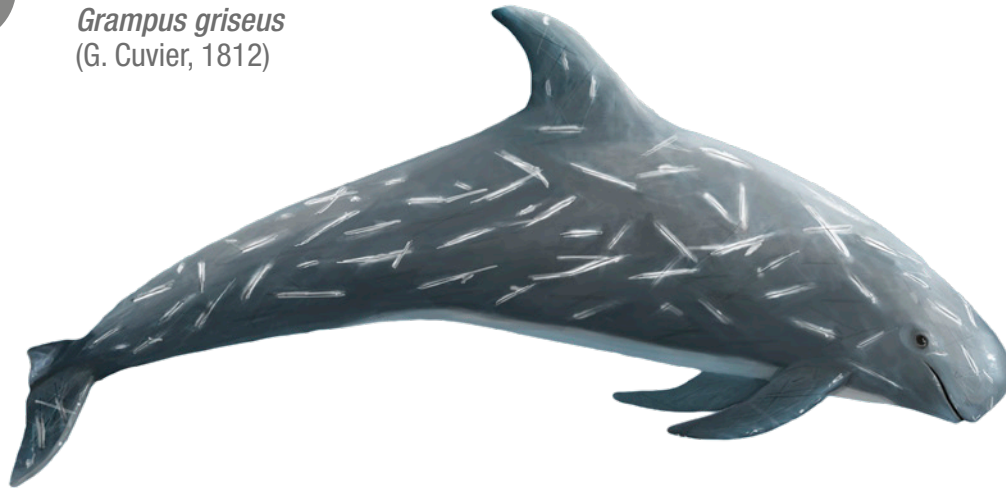
BUT...

- Noticeably globose head
- Long pectoral fins
- White anchor-shaped patch on the chest
- Low, wide-based, sickle-shaped dorsal fin



Risso's Dolphin

Grampus griseus
(G. Cuvier, 1812)



BRIEF DESCRIPTION

Risso's Dolphin is a widely distributed species found in deep waters, in particular around seamounts and escarpments, where it is thought to feed on cephalopods such as squid. It usually moves in small groups of 2–45 animals, or up to 100 individuals on occasion. Nonetheless, it can also be encountered singly or in large groups that can number from 200 to 1,000 individuals. The species is easily identifiable by its bulbous head and peculiar, deep, V-shaped crease extending from the blowhole to the tip of the rostrum. Moreover, its body is marked with scratches and scars, which increase with age.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

Risso's Dolphin is widely distributed in the Mediterranean Sea, although most frequently sighted in the western basin, Ligurian-Corso-Provençal basin, northern Alboran Sea, southern Tyrrhenian Sea and occasionally the

Balearic Sea. No information is available for the southern Mediterranean Sea. The latest scientific studies suggest that the Risso's Dolphins in the Mediterranean form a distinct population that differs from the Atlantic Risso's Dolphins. They appear to favour deep offshore waters, in particular those over steep shelf slopes and submarine canyons. No specific data on large-scale population distribution, abundance or trends over time are available as these animals are not usually seen in groups near coasts. This makes them hard to study and further information is needed to assess whether the species is declining.

Risso's Dolphins are frequently found entangled in fishing gear such as longlines and gillnets and they are also threatened by chemical pollutants and underwater noise pollution such as that produced by boats and sonar equipment.

IUCN RED LIST

Mediterranean status: Data Deficient

Global status: Least Concern



LITTLE KNOWN DOLPHIN, WIDELY DISTRIBUTED IN THE MEDITERRANEAN AND MOST OFTEN SIGHTED IN RICH PELAGIC WATERS (SEE HATCHED AREA ON MAP). POPULATIONS ARE PROBABLY BEING AFFECTED BY ENTANGLEMENT IN FISHING GEAR, POLLUTION AND UNDERWATER NOISE

Risso's Dolphin

Grampus griseus



Average adult length 3–4 m

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)
Family: **Delphinidae**
Genus: ***Grampus***
Species: ***griseus***

CURIOSITIES

The scratches and scars on a Risso's Dolphin's body are inflicted by other dolphins or the sharp beaks of squid while feeding.

CAN BE CONFUSED WITH...

False Killer Whale [p. 16]



BUT...

- Characteristic pale-coloured and extensively white scarred body
- Squared head without a beak
- White anchor-shaped patch on the chest



Short-beaked Common Dolphin

Delphinus delphis
Linnaeus, 1758



BRIEF DESCRIPTION

The Short-beaked Common Dolphin is characterized by an hourglass pattern on the flanks, which makes it easy to distinguish. The species can be found both offshore, where there are steep slopes (such as escarpments) and nutrients, and in coastal waters. They are rarely sighted near the shore. Sometimes they are seen in mixed groups with other dolphin species forming aggregations of 50–70 individuals. Using echolocation and group hunting techniques, the Common Dolphin primarily feeds on schooling fishes.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

Once a very common species, the Mediterranean population of Common Dolphins has declined by more than 50% in the past 30–45 years. However, there is very limited information on population size and trends for this species. The species is today relatively abundant in the Alboran Sea, off western Sardinia, in the Sicily Channel around Malta, in the eastern Ionian Sea, in the Aegean Sea, and off

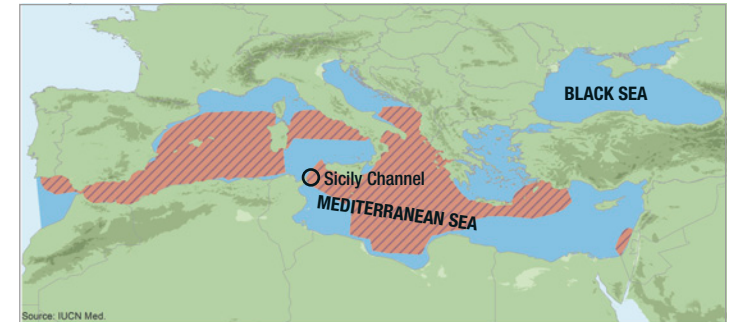
Israel; whereas it has apparently vanished from many areas of the Mediterranean including the Adriatic Sea, Balearic Sea, Provençal basin and Ligurian Sea. As with many cetacean species, little is known about their presence in the waters along the North African coast.

The decline in numbers of Common Dolphins in the Mediterranean could be a consequence of prey depletion by commercial fisheries, by-catch in gillnets (drift gillnets), habitat degradation, noise pollution, environmental changes and high loads of pollutants, including PCBs and heavy metals, which accumulate in their tissues and are thought to cause immune suppression, reproductive impairment and ultimately death.

IUCN RED LIST

Mediterranean status: Endangered

Global status: Least Concern



A VERY COMMON DOLPHIN IN THE PAST, BUT TODAY IT IS COMMON ONLY IN THE WESTERN MEDITERRANEAN (SEE HATCHED AREA ON MAP). REDUCTIONS IN PREY POPULATIONS, POLLUTION, BY-CATCH IN FISHING GEAR AND CLIMATE CHANGE ARE THE MAIN THREATS TO ITS ENDANGERED POPULATIONS

Short-beaked Common Dolphin

Delphinus delphis



Average adult length 2–2.2 m

TAXONOMIC CLASSIFICATION

Class: **Mammalia**

Order: **Cetartiodactyla**

Cetacea (unranked)

Odontoceti (unranked)

Family: **Delphinidae**

Genus: ***Delphinus***

Species: ***delphis***

CURIOSITIES

Females have been seen to assist other dolphins during birth, as well as with daily infant care.

CAN BE CONFUSED WITH...

Striped Dolphin [p. 14]



BUT...

- The pale yellow and grey hourglass pattern on the sides readily distinguishes the species from any other.



Sperm Whale

Physeter macrocephalus
Linnaeus, 1758



BRIEF DESCRIPTION

Sperm Whales are the largest toothed whales on earth, and there are large differences in body size between males and females (with females a third shorter and half as heavy as males). They occur mostly on continental slopes, where they can dive very deep to feed, mostly on cephalopods. They can descend to more than 1,000 m and stay submerged for over an hour, although on average their dives are 20–50 minutes long at depths of 300–600 m. They are highly migratory and the males, which generally have a solitary lifestyle, migrate to join the female groups during the breeding season. The most distinctive feature of the species is the huge squared head.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

Sperm Whales are widely distributed in the Mediterranean Sea. The Mediterranean subpopulation, which is not well studied, seems to have some social behavioural habits that differ in other seas. Even though there is no reliable

estimate of population size, it is thought that the total number of Sperm Whales in the Mediterranean basin amounts to only a few hundred individuals. Nevertheless, there is evidence that Sperm Whales were once common in some parts of the Mediterranean, such as in the Strait of Messina and the waters of the Aeolian Islands (coast of Sicily) at least until the 1950s, where they could be seen in large aggregations of as many as 30 individuals. Nowadays such sightings are rare. Over the last decade increasingly frequent reports of annual strandings (stranded, floating dead or entangled Sperm Whales) from France and Italy point to a considerable decline in the number of individuals in the region. Sperm Whales are mainly threatened by entanglement in fishing gear (especially swordfish drift gillnets and tuna driftnets), ship strikes and disturbance by maritime traffic.

IUCN RED LIST

Mediterranean status: Endangered

Global status: Vulnerable



THE MEDITERRANEAN POPULATION OF SPERM WHALES HAS DECLINED OVER THE PAST 20 YEARS. ENTANGLEMENT IN FISHING GEAR, VESSEL STRIKES AND DISTURBANCE BY INTENSE BOAT AND SHIP TRAFFIC ARE THE PRIMARY CAUSES OF ITS ENDANGERED CONSERVATION STATUS

Sperm Whale

Physeter macrocephalus



Average adult length (males) 16–18 m

TAXONOMIC CLASSIFICATION

Class: **Mammalia**

Order: **Cetartiodactyla**

Cetacea (unranked)

Odontoceti (unranked)

Family: **Physeteridae**

Genus: ***Physeter***

Species: ***macrocephalus***

CURIOSITIES

The Sperm Whale is truly an animal of extremes. It has the largest brain and the longest intestine of any animal on the planet.

CAN BE CONFUSED WITH...

Humpback Whale [p. 16]



BUT...

- Underside of flippers not white (as in the Humpback Whale)
- Broad, massive head
- Spatulate flippers



Striped Dolphin

Stenella coeruleoalba
(Meyen, 1833)



BRIEF DESCRIPTION

Striped Dolphins are characterized by a pattern of blue-grey and white stripes and blazes along the lateral and dorsal sides of the body. The Striped Dolphin is an oceanic species which often travels in large groups, preferring highly productive open waters beyond the continental shelf that are rich in food. It can also be found close to shore where the waters are relatively deep. It feeds on a wide variety of small fish, especially lanternfish, and squid, which it can catch by diving down to 200 m.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

Striped Dolphins are the most abundant and one of the best known cetaceans in the Mediterranean, in both the western and the eastern basins. The species is particularly common in the Ligurian Sea, Gulf of Lion, the Alboran Sea and the waters between the Balearic Islands and the Iberian Peninsula. The Western Mediterranean subpopulation of Striped Dolphins, excluding that of the Tyrrheni-

an Sea, was estimated at 117,880 individuals in 1991. The high number of presumed fatalities in the following years, due to the factors outlined below, and the limited regional monitoring means there is no reliable, up-to-date information on their actual abundance. In the past, many Striped Dolphins were hunted for their meat, which was used as bait for shrimp traps and long lines. A disease outbreak in 1990–1992, caused by a morbillivirus, devastated a large proportion of the population, causing many deaths. The absorption of high concentrations of organo-chlorine pollutants derived from agricultural pesticides and the continuous use of pelagic drift nets may all be responsible for the decline of striped dolphin populations in the Mediterranean.

IUCN RED LIST

Mediterranean status: Vulnerable

Global status: Least Concern



THE MOST COMMON DOLPHIN IN THE MEDITERRANEAN SEA (SEE HATCHED AREA ON MAP). HABITAT DEGRADATION CAUSED BY AGRICULTURAL PESTICIDES AND ANTIFOULING PAINTS, WATER POLLUTION AND COMMERCIAL FISHERIES POSE SIGNIFICANT THREATS TO THIS SPECIES

Striped Dolphin

Stenella coeruleoalba



Average adult length 2–2.2 m

TAXONOMIC CLASSIFICATION

Class: *Mammalia*
Order: *Cetartiodactyla*
Cetacea (unranked)
Odontoceti (unranked)
Family: *Delphinidae*
Genus: *Stenella*
Species: *coeruleoalba*

CURIOSITIES

The species is highly active; it can do amazing acrobatics and leap up to 7 m above the sea surface.

CAN BE CONFUSED WITH...

Short-beaked Common Dolphin [p. 12]



BUT...

- Its unique colour pattern (dark grey back, light grey flanks and pinkish white belly) readily distinguishes the species from any other.



Black Sea Bottlenose Dolphin

Tursiops truncatus ponticus
Barabash-Nikiforov, 1940



The dolphins that live in the Black Sea are genetically and morphologically distinct from other Bottlenose Dolphin populations in the eastern and western Mediterranean and north-eastern Atlantic; hence they are recognized as an endemic subspecies found nowhere else. The total population size is unknown but is likely to be less than 1,000. The species occurs throughout the Black Sea area, including the Kerch Strait, the Sea of Azov and the Turkish Straits. Different groups of Bottlenose Dolphin migrate and gather every autumn in the waters south of Crimea (Cape Fiolent-Cape Sarych) and in other areas off the Russian, Georgian and Turkish coasts. In the past, the population was subject to extensive commercial slaughter. Commercial hunting of Black Sea cetaceans was banned in 1966 and nowadays accidental mortality is mainly due to fishing gear like bottom-set gillnets, purse seines, trammel nets and trap nets. Other causes, such as depleted stocks of their prey species and exotic diseases due to increasing sewage pollution, have been identified as the main threats to the survival of this endangered subspecies.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Delphinidae**
Genus: ***Tursiops***
Species: ***truncatus* ssp. *ponticus***

IUCN RED LIST

Global status: **Endangered**

Black Sea Common Dolphin

Delphinus delphis ponticus
Barabash-Nikiforov, 1935



The Common Dolphin is found in all tropical and warm-temperate waters, but scientific evidence suggests the Black Sea population is a distinct subspecies. These dolphins do not look physically different from the common dolphins in the Mediterranean. The subspecies occurs almost throughout the Black Sea, except for the Kerch Strait and the Sea of Azov. Bulgarian and Russian fishermen used to catch large numbers of these dolphins in the Black Sea for meat and oil. It is estimated that 440,000 Common Dolphins were slaughtered in 1958-66 and 365,000 in the preceding 12 years. The fishery ended by the mid-1960s after Common Dolphins became so rare that it was no longer commercially viable to hunt them; the population nearly collapsed and disappeared entirely. There has been some recovery since, and although the present population size is unknown, it may consist of tens of thousands of individuals. Current threats to these dolphins in the Black Sea are overfishing of their main prey species (anchovies and sprats) and increasing water eutrophication, as well as disease.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



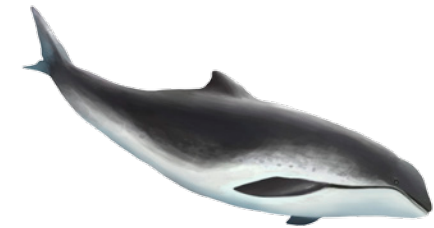
Family: **Delphinidae**
Genus: ***Delphinus***
Species: ***delphis* ssp. *ponticus***

IUCN RED LIST

Global status: **Vulnerable**

Black Sea Harbour Porpoise

Phocoena phocoena relicta
Abel, 1905



This subspecies of Harbour Porpoise inhabits mainly shallow waters over the continental shelf around the entire Black Sea coast, but sometimes it can also be found far offshore in deep waters. Some individuals make annual migrations, leaving the Sea of Azov and north-western Black Sea before winter and returning in spring. The primary wintering areas are in the south-eastern Black Sea, where most of the Black Sea porpoise population congregates every year. These winter feeding grounds coincide with those of the anchovy, an important prey species for harbour porpoises during the cold season. Until 1983, unregulated hunting was the primary threat to the species and led to a dramatic reduction in numbers. The decline continues, caused by entanglement in fishing gear (bottom-set gillnets), ship strikes, habitat degradation and depletion of their food source. Moreover, four mass mortality events in the past 20 years killed several thousand individuals. Survey results suggest that the current population numbers at least several thousand and possibly a few tens of thousands.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Phocoenidae**
Genus: ***Phocoena***
Species: ***phocoena* ssp. *relicta***

IUCN RED LIST

Global status: **Endangered**



Common Minke Whale

Balaenoptera acutorostrata
Lacépède, 1804



The Common Minke Whale is the smallest member of the rorqual family of whales. It is found in all oceans and in both coastal and offshore waters, though it seems to prefer the more icy waters of polar regions. The species only occurs as a visitor in the Mediterranean Sea. North Atlantic individuals occasionally enter the Mediterranean through the Strait of Gibraltar (less than one record per year on average) and are usually found over the continental shelf. Since only a few animals have been sighted, very little is known about their behaviour compared to other whales in the region. They mostly feed on krill, copepods and small schools of fish. They are still commercially hunted in other seas, but there is no indication that the population is presently endangered.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Mysticeti (unranked)



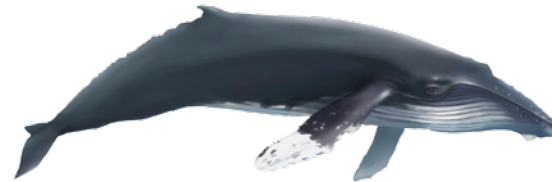
Family: **Balaenopteridae**
Genus: ***Balaenoptera***
Species: ***acutorostrata***

IUCN RED LIST

Global status: **Least Concern**

Humpback Whale

Megaptera novaeangliae
(Borowski, 1781)



The Humpback Whale is a highly migratory species that undertakes long journeys between high-latitude summer feeding grounds and tropical winter breeding grounds. The species tends to live in small groups. Both feeding and breeding occur in shallow waters, while migration routes take these whales across deep oceanic waters. It is not rare to see them breaching fully out of the water.

Humpback Whales are rare visitors to the Mediterranean Sea (31 sighting and stranding events have been recorded), when individuals from the North Atlantic occasionally enter the region. An increase in the number of Humpbacks in the Mediterranean has been observed in recent years, however, with one record approximately every year and a half. It is not known if these whales are able to find their way back to the Atlantic or if they stay in the Mediterranean. The species is completely absent from the Sea of Marmara and Black Sea.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Mysticeti (unranked)



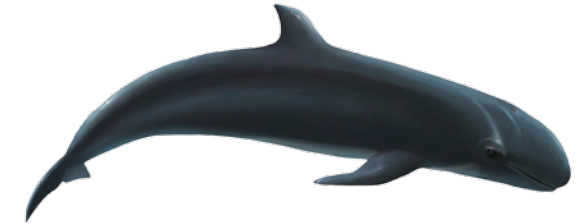
Family: **Balaenopteridae**
Genus: ***Megaptera***
Species: ***novaeangliae***

IUCN RED LIST

Global status: **Least Concern**

False Killer Whale

Pseudorca crassidens
(Owen, 1846)



The False Killer Whale is a typical inhabitant of open oceanic waters, although it can also be found over steep slopes and in continental shelf waters, especially at low latitudes. It is highly social and typically lives in pods (groups) of 10–20 individuals, often consisting of several females, their calves, one or more males and/or juveniles. They feed primarily on cephalopods and fish but are also known to attack other cetacean species for food. They are cooperative hunters and frequently share their prey. False Killer Whales are rare in the Mediterranean basin, where individuals and small groups may stray from the Atlantic and perhaps from the Red Sea through the Suez Canal. No viable populations are known to live in the Mediterranean or Black Seas. The main threats are currently direct and incidental catches by fishing boats, noise disturbance from boats and sonar equipment, and pollution.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Delphinidae**
Genus: ***Pseudorca***
Species: ***crassidens***

IUCN RED LIST

Global status: **Data Deficient**



Rough-toothed Dolphin

Steno bredanensis
(G. Cuvier *in* Lesson, 1828)



Rough-toothed Dolphins live in groups of variable size, from less than 10 to more than 100 individuals. They are found offshore in oceanic waters above and beyond the continental shelf. Rough-toothed Dolphins eat cephalopods and fish, including large animals that are torn to pieces before being swallowed. The species was formerly considered a visitor to the Mediterranean Sea, but now a resident population has been tentatively recognized in the eastern Mediterranean as a result of frequent sightings and strandings in this area. Here the Rough-toothed Dolphin has been observed in both coastal and pelagic waters. Some dolphins have been accidentally killed in gillnets in the Mediterranean. By-catch is the main threat to this species. Moreover, a mass stranding of these dolphins occurred in Cyprus in 2010, the cause of which has not been determined. The possible isolation of this Mediterranean population from other populations in Atlantic waters is an additional challenge for the survival of this species in the region. Population figures are unknown in the Mediterranean Sea, so it has not been assessed for the IUCN's regional Red List.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Delphinidae**
Genus: ***Steno***
Species: ***bredanensis***

IUCN RED LIST

Global status: **Least Concern**

Killer Whale

Orcinus orca
(Linnaeus, 1758)



The Killer Whale can be found in all the oceans of the world, from polar to tropical waters, and from inshore bays to the open ocean. In the Mediterranean Sea, the Killer Whale is considered resident in the Strait of Gibraltar and its adjacent Atlantic waters; it is a visitor to the western Mediterranean and is occasionally recorded as a vagrant in the eastern basin. It is estimated that there are at least 32 individuals in the Gibraltar Strait. Their occurrence seems to be related to the presence of one of its prey species, the large bluefin tuna that migrate through the Strait. Killer Whales are seen as competitors by fisheries, attacking tuna caught on longlines. Direct killing by fishermen, a decrease in their food supply (especially tuna) and disturbance and habitat degradation (underwater noise from ferries and sonar equipment, pollutants, oil spills, etc.) are the biggest threats to their survival in the region.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Delphinidae**
Genus: ***Orcinus***
Species: ***orca***

IUCN RED LIST

Global status: **Data Deficient**

Sei Whale

Balaenoptera borealis
Lesson, 1828



The Sei Whale breeds and feeds in open oceans. It migrates long distances and is normally found alone or in groups of 2-5 individuals. Sei Whales feed mostly by filtering plankton (planktonic crustaceans such as krill and shrimp, as well as small fish) while swimming. Although they are probably among the fastest cetaceans, they do not dive very deep and stay below the surface for only 5-10 minutes at a time. Sei Whales have rarely been sighted or stranded in the Mediterranean, with just a few records from France and Spain. No records exist for the Sea of Marmara and Black Sea. Their global population, however, has declined by 80% due mostly to particularly intensive whaling in the southern hemisphere and North Pacific from the late 1950s to the mid-1970s.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Mysticeti (unranked)



Family: **Balaenopteridae**
Genus: ***Balaenoptera***
Species: ***borealis***

IUCN RED LIST

Global status: **Endangered**



North Atlantic Right Whale

Eubalaena glacialis
(P.L.S. Müller, 1776)



Northern Right Whales are migratory animals, spending winter in warmer seas and migrating to cooler polar waters in late summer and early autumn. Alone or in pairs, the Northern Right Whales moves slowly with occasional leaps before diving. It lives in the open ocean and uses coastal lagoons and bays for breeding. They were formerly hunted but nowadays the threats to their survival come from collisions with vessels and entanglement in fishing gear. Right Whales were once abundant in all oceans in the temperate latitudes of both hemispheres. Today the northern populations number some 300–350 individuals off the east coast of North America. No breeding populations are known to live in the Mediterranean and Black Seas, and there have been few records of their presence in the region and in adjacent North-east Atlantic waters.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Mysticeti (unranked)



Family: **Balenidae**
Genus: *Eubalaena*
Species: *glacialis*

IUCN RED LIST

Global status: Endangered

Grey Whale

Eschrichtius robustus
(Lilljeborg, 1861)



Grey Whales occur in the North Pacific (with two separate eastern and western populations) but they were once also present in the North Atlantic until the late 17th century. They perform one of the longest migrations of any mammal species, travelling 16,000–22,530 km every year between their summer feeding grounds and their winter breeding ones. Feeding on small animals from the sea bottom such as crustaceans and polychaete tube worms, the species approaches the coast to feed (and to breed) and can easily be observed from the shore. As a result, tourist whale watching has become a thriving business along its migration route. There have been only two sightings of a single individual of this species in the Mediterranean, and it has never occurred in the Sea of Marmara or Black Sea. Their coastal distribution makes them vulnerable to entanglement in fishing gear, disturbance by vessels and noise, and the effects of pollutants.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Mysticeti (unranked)



Family: **Eschrichtiidae**
Genus: *Eschrichtius*
Species: *robustus*

IUCN RED LIST

Global status: Least Concern

Dwarf Sperm Whale

Kogia sima
(Owen, 1866)



Dwarf Sperm Whales are the smallest of all the whales. As they are even smaller than some dolphins, they are difficult to observe at sea. They are a pelagic species inhabiting temperate, warm and tropical seas with a preference for deep waters, where they feed on cephalopods. Dwarfs usually live in small groups of less than 5 individuals and are thought not to migrate extensively. Interestingly, Dwarfs use a technique for escaping predators that is very similar to that used by squid: they can eject over 12 litres of a reddish-brown liquid from sacs in the lower intestine to create a dense cloud in the water that confuses predators. In general, the species is rather less affected by human activities than other cetaceans. Direct and incidental catching, and pollution (plastic ingestion in particular) remain the main threats to the conservation of Dwarf Sperm Whales. The only records of this species in the Mediterranean are of stranded individuals.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Physeteridae**
Genus: *Kogia*
Species: *sima*

IUCN RED LIST

Global status: Data Deficient



Northern Bottlenose Whale

Hyperoodon ampullatus
(Forster, 1770)



The Northern Bottlenose Whale inhabits the deep slopes and oceanic waters beyond the continental shelf in temperate and sub-polar waters in the North Atlantic. Usually seen in small groups of 1-4 whales, the species is primarily found in waters deeper than 500 m often associated with submarine canyons, where it feeds on a variety of animals such as squid, fish, starfish and prawns. As they are curious animals, Northern Bottlenose Whale often approach stationary boats, making them especially vulnerable to injury or hunting. They used to be the most heavily hunted of the beaked whales, both for oil and for animal feed. Current threats to the conservation of this species are poorly understood. As with other species, habitat degradation, fishing and boat collisions, and increasing underwater noise from military sonar, commercial shipping and oil or gas exploration, among others, are impacting its populations. There have only ever been two confirmed sightings of this species in the western Mediterranean and it has never been reported in the Sea of Marmara or Black Sea.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Ziphiidae**
Genus: *Hyperoodon*
Species: *ampullatus*

IUCN RED LIST

Global status: Data Deficient

Blainville's Beaked Whale

Mesoplodon densirostris
(Blainville, 1817)



Blainville's Beaked Whale is distributed globally in tropical and temperate waters, where it lives in small groups or has a solitary lifestyle. It is probably the most widely distributed species of *Mesoplodon*. The species is found in deep waters, frequently off remote oceanic islands, feeding on cephalopods and deep-sea fish, but it may sometimes go close to the shore. There is little information on its abundance or population trends. No populations are known to live in the Mediterranean and Black Seas. The only confirmed occurrence of this species in the Mediterranean was of a female stranded on a beach in Catalonia (Spain) in 1980. It has never occurred in the Sea of Marmara or Black Sea. The main potential threats to the survival of this species are by-catch, direct hunting, and poisoning from rubbish. Loud underwater noises, such as those from active sonar and seismic operations, can impact their behaviour and orientation causing subsequent strandings and fatalities.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Ziphiidae**
Genus: *Mesoplodon*
Species: *densirostris*

IUCN RED LIST

Global status: Data Deficient

Gervais' Beaked Whale

Mesoplodon europaeus
(Gervais, 1855)



Gervais' Beaked Whale occurs from temperate North Atlantic to tropical Central Atlantic waters. The species lives mostly in deep waters feeding on squid and mesopelagic fish (from 200 m down to around 1,000 m). Its timid behaviour and habitat preferences are why little is known about the biology of this species. There is little information on abundance and none on trends in abundance for this species. No stable populations are known to live in the Mediterranean, and the species has never occurred in the Sea of Marmara or Black Sea. In the Mediterranean basin only one specimen has been reported from a stranding in Castiglione (Livorno, Italy). This species, like other beaked whales, is likely to be vulnerable to loud underwater noises, such as those generated by navy sonar and seismic exploration; poisoning due to swallowing rubbish; and by-catch in fishing nets.

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Cetartiodactyla**
Cetacea (unranked)
Odontoceti (unranked)



Family: **Ziphiidae**
Genus: *Mesoplodon*
Species: *europaeus*

IUCN RED LIST

Global status: Data Deficient



Mediterranean Monk Seal

Monachus monachus
(Hermann, 1779)



BRIEF DESCRIPTION

The Mediterranean Monk Seal is the only seal (pinniped) inhabiting the Mediterranean region. Until the 18th century these animals could be seen on open beaches as well as rocky shore lines; nowadays, however, they are restricted to very few sheltered coastal areas far from human disturbance. Pregnant females give birth in isolated sea caves that are difficult to access, often along desolate, cliff-bound coasts. Monk Seals' favourite feeding habitats are coastal shallow waters, where they feed primarily on fish, such as red mullet, seabream and bogue, and octopus.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

The Mediterranean Monk Seal was once widely and continuously distributed in the Mediterranean, Black and adjacent seas, and in the Eastern Atlantic from Morocco to Cape Blanc. Today it is extinct in the Black Sea and only a few subpopulations survive along some coastal stretches of the Mediterranean, at Cape Blanc between Mauritania and Western Sahara and around the Madeira Islands of Portugal. The entire Mediterranean Monk Seal population numbers less than 600 individuals divided into very small colonies that are probably isolated from each other. The largest subpopulation, comprising 250–300 individuals,

inhabits the eastern Mediterranean (Greece and Turkey), and a few seals still seem to use the waters of Algeria and Cyprus. Sporadic sightings of some individuals have been reported from other Mediterranean coasts. The species is presently ranked as one of the marine mammal species at imminent risk of extinction, and the most endangered of all pinniped species in the world. Mediterranean Monk Seals have a long history of interaction with humans: they have been caught for subsistence and commercial exploitation and have been directly persecuted (mainly with shotguns or dynamite) as they are believed to be strong competitors for fisheries resources. They also become entangled in static nets (trammel and gill nets). Documents from as early as the 15th century, for example, describe how Monk Seals were commercially harvested for their skin and oil along the coasts of north-west Africa. Their current dramatically low population is of great concern and is also in part due to the loss of good habitat for breeding and feeding (foraging), marine pollution, disease, disturbance from maritime traffic and poor enforcement of legal protection measures. The isolation of the colonies and lack of interaction between subgroups might also affect the survival of the Mediterranean population by reducing genetic diversity.



ONCE FOUND THROUGHOUT THE MEDITERRANEAN AND BLACK SEAS, THIS SPECIES IS NOW RESTRICTED TO A FEW GREEK AND TURKISH ISLANDS, AND OCCASIONALLY VISITS SOME OTHER SITES. ITS SMALL POPULATION IS THREATENED BY FISHING GEAR, LOSS OF BREEDING AND FEEDING HABITAT, DISEASE, POLLUTION AND HUMAN DISTURBANCE

Mediterranean Monk Seal *Monachus monachus*



Average adult length 2.4 m

TAXONOMIC CLASSIFICATION

Class: **Mammalia**
Order: **Carnivora**
Super family: **Pinnipedia**
Family: **Phocidae**
Genus: ***Monachus***
Species: ***monachus***

CURIOSITIES

When born, pups have a white patch of fur on their ventral side. The variation in the features of this patch allows distinguishing male from female pups. After their first moult, pups shed this lanugo fur and all turn silver/grey. Then when Mediterranean Monk Seals reach maturity, males get a ventral white patch again while females do not.

IUCN RED LIST

Mediterranean status: Critically Endangered
Global status: Critically Endangered



Sea turtles of the Mediterranean Sea



Major nesting sites of *Caretta caretta* and *Chelonia mydas* in the Mediterranean (based on Casale and Margaritoulis 2010)

Sea turtles are one of the longest-living groups of animals ever to have existed on earth. The first fossil records of primitive turtles that had an aquatic lifestyle are from the Middle Jurassic period (180–160 million years ago). Although physically and physiologically perfectly adapted to life at sea, sea turtles still depend on the terrestrial environment during one of the most vital phases of their life cycle: nesting and incubation of their eggs on coastal beaches. Marine turtles spend most of their lives at sea, foraging, moving between feeding areas and migrating to and from nesting sites. Some sea turtle populations nest and feed in the same general areas; others migrate great distances between their winter or feeding grounds and their nesting beaches once they reach sexual maturity (generally, at about 25–35 years of age). For this they have remarkable orientation and navigation abilities. Adult females usually return to the beaches in the vicinity of

where they were born to lay their eggs, normally using the same beach each year thereafter. As baby turtles emerge from the sand they immediately start crawling to the sea and swim into deeper water. Life for baby turtles is risky: perhaps only one in a few hundred or a thousand hatchlings will survive to become an adult marine turtle.

Sea turtles feed primarily on seagrass, jellyfish, sea squirts, sponges, soft corals, molluscs, crabs, squid and fish depending on the species. It seems that some species feed on whatever food is available in abundance. Others, like the Green Turtle *Chelonia mydas*, are herbivorous as adults and their diet is based primarily on seagrass and algae.

Only seven species of sea turtles currently inhabit the world's oceans and three of these species frequent the

ALTHOUGH PHYSICALLY AND PHYSIOLOGICALLY PERFECTLY ADAPTED TO LIVE AT SEA, SEA TURTLES STILL DEPEND ON THE TERRESTRIAL ENVIRONMENT DURING ONE OF THE MOST VITAL PHASES OF THEIR LIFE CYCLE: NESTING AND INCUBATION OF THEIR EGGS ON COASTAL BEACHES

Mediterranean Sea. The Leatherback Turtle *Dermochelys coriacea* is recorded in this sea as an occasional visitor; the Green Turtle *Chelonia mydas* and the Loggerhead Turtle *Caretta caretta* both nest in the Mediterranean Sea and as a result of their isolation from other populations in the Atlantic Ocean are recognized as distinct populations. Two other species (the Hawksbill *Eretmochelys imbricata* and Kemp's Ridley Sea Turtle *Lepidochelys kempii*) are very rarely encountered in the Mediterranean.

No specific information is available for marine turtles in the Black Sea.



Loggerhead Turtle

Caretta caretta
(Linnaeus, 1758)

BRIEF DESCRIPTION

The Loggerhead Turtle is the most common of all the Mediterranean sea turtles found in coastal and marine waters. It is a solitary and migratory species. Some of the individuals born in the Atlantic enter the western and central Mediterranean through the Strait of Gibraltar, where they stay for some months or years before possibly returning to their places of origin. Mediterranean-born Loggerhead Sea Turtles frequent the whole basin. The preferred habitat of Loggerhead Turtles changes throughout their life cycle: juveniles are typically found drifting in warm ocean currents; older juveniles and adults are most often found in coastal waters and estuaries, with females briefly coming ashore to lay their eggs. The species is carnivorous, feeding on jellyfish, shellfish, crabs, and even fish.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

In the Mediterranean, the Loggerhead is the most common nesting turtle of the three marine turtles found in the region. Total population figures are unknown because juvenile and male sea turtles do not come ashore and population data are mainly based on the numbers of adult females that nest on beaches. Today, most of the nesting beaches used by loggerhead turtles are in Greece, Turkey, Cyprus and Libya. However, new sites might be discovered in the future. The northern coast of Albania (Drini Bay, in particular) has recently been found to be used by Loggerhead Turtles and occasionally by Green Turtles as feeding

grounds and as a migration stopover between the Ionian and Adriatic Seas.

Scientists estimate that the greatest abundance of Loggerhead Turtles occurs in the westernmost part of the Mediterranean (from the Alboran Sea to the Balearic Islands), in the Strait of Sicily, in the Ionian Sea, on the wide continental shelves in the northern Adriatic and off Tunisia, Libya and Egypt, and off the south-east coast of Turkey. In the entire Mediterranean, the average number of documented nests is over 7,200 a year (2010 data); however, annual estimates at some sites show that nest numbers are declining.

Threats to their survival include predation at the nest, beach development and disturbances such as beach lighting from houses and hotels causing disorientation of turtle hatchlings, incidental capture in fishing gear, entanglement in or ingestion of marine debris, intentional killing and marine pollution. It is estimated that over 150,000 marine turtles, mostly Loggerhead Turtles, are caught by Mediterranean fisheries each year, primarily by longlines and gillnets. Loss of habitat due to beach development (particularly for tourism) and industrialization is a clear threat.



LOGGERHEAD TURTLES NEST ON CERTAIN BEACHES ALONG THE EASTERN MEDITERRANEAN AND NORTH AFRICAN COASTS. CONTINUING THREATS TO THE POPULATION INCLUDE ENTANGLEMENT IN FISHING GEAR, DIRECT KILLING, MARINE DEBRIS, AND LOSS AND DEGRADATION OF ITS NESTING SITES

Loggerhead Turtle *Caretta caretta*

TAXONOMIC CLASSIFICATION

Class: **Reptilia**
Order: **Testudines**
Family: **Cheloniidae**
Genus: ***Caretta***
Species: ***caretta***

Average adult length (females): 66–85 cm



IUCN RED LIST

Global status: Endangered



Green Turtle

Chelonia mydas
(Linnaeus, 1758)

BRIEF DESCRIPTION

This large sea turtle can be found in tropical and subtropical marine waters worldwide, including the Mediterranean Sea. The Green Turtle is a long-lived animal that requires upward of 25-35 years to reach sexual maturity and can weigh up to 230 kg. The Green Turtle gets its name from the colour of its body fat. Unlike other sea turtles, large juveniles and adults feed almost exclusively on seagrasses and algae.

The Green Turtle uses three types of habitat during its life: nesting beaches, convergence zones in pelagic open-sea habitats and shallow waters for feeding (foraging grounds). Adults nest on certain Mediterranean beaches and the hatchlings make their way to the open sea after hatching. They then float passively on ocean currents on mats of *Sargassum*, a brown seaweed. After a period of development, the young turtles leave the oceanic environment and migrate to coastal waters. These areas are generally seagrass habitats or rich algal grounds that are good for feeding. Adults frequent shallow coastal areas and migrate to their nesting beaches every two or three years.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

Turkey, Syria and Cyprus have some of the species' most important nesting beaches in the Mediterranean; the average number of documented nests is over 1,500 per year (2010 data), but their numbers seem to be declining. Other coastlines, such as those of Israel, Egypt and various

islands in the Aegean Sea, are also used sporadically for nesting. A small, distinct Mediterranean population seems to exist, separate from other Green Turtle outside the Mediterranean, although some breeding with other populations might occur.

Many areas of the North African coast are important wintering and foraging grounds for adult turtles, especially Libya and Egypt, but they are also found off Israel, Greece, Turkey, Lebanon and Syria. They have occasionally been reported from the Adriatic Sea (Italy, Croatia and Albania), Tunisia and the western basin of the Mediterranean.

Green Turtles, like other sea turtle species, are highly vulnerable to human impacts during their lives. Direct threats are fisheries (particularly drift nets), collisions with boats, habitat degradation and marine and coastal pollution. Turtle nesting beaches are particularly important and sensitive habitats for the green sea turtle's survival and need special attention to preserve them from erosion, pollution and disturbance.



GREEN TURTLES MOSTLY NEST IN THE EASTERN MEDITERRANEAN, WHILE AREAS OFF NORTH AFRICA ARE IMPORTANT FOR FEEDING. DEGRADATION AND LOSS OF NESTING BEACHES, NEST PREDATION, BY-CATCH IN FISHERIES, DIRECT EXPLOITATION AND MARINE POLLUTION THREATEN THEIR POPULATION

Green Turtle
Chelonia mydas

TAXONOMIC CLASSIFICATION

Class: **Reptilia**
Order: **Testudines**
Family: **Cheloniidae**
Genus: ***Chelonia***
Species: ***mydas***

Average adult length 80–120 cm



IUCN RED LIST

Global status: Endangered



Leatherback Turtle

Dermochelys coriacea
(Vandelli, 1761)

BRIEF DESCRIPTION

Leatherbacks differ from most other marine turtles in that they feed in the open ocean rather than in coastal waters as other turtles do. They are highly migratory and are the most widely distributed of all sea turtles in the oceans. They are not common in the Mediterranean. From what is known, the species spends most of its life in the open ocean feeding primarily on jellyfish and other gelatinous invertebrates, pelagic crabs and juvenile fish. Adult females will come ashore to nest, preferring open, isolated beaches immediately adjacent to deep water along continental shorelines.

POPULATION STATUS, DISTRIBUTION AND MAIN THREATS

The worldwide population of Leatherbacks is estimated to have declined by more than 78% since the early 1980s. Many areas frequented by these turtles in the Pacific and Atlantic Oceans have seen even worse declines in numbers, and some populations have vanished altogether. West Africa is now probably the region that hosts the largest population of nesting Leatherbacks, although there are also some large nesting grounds along the Pacific coasts. Almost every area and country in the Mediterranean has

records of the presence of Leatherheads in its waters. However, it seems that Leatherback Turtles do not nest in the Mediterranean and the individuals found in the region are likely to be from the Atlantic. Scientific evidence suggests that they concentrate in specific areas like the Tyrrhenian and Aegean Seas and the area around the Strait of Sicily.

At sea, Leatherback Turtles often become entangled in fishing gear (longlines, driftnets and other gear). This can result in injury or drowning. Fishing gear probably represents the main threat to these Mediterranean visitors. Leatherbacks are also vulnerable to boat and ship collisions and serious injuries from ingesting plastic material that they mistake for jellyfish. As for other turtle species, no specific information is available for this species in the Black Sea.



LEATHERBACK TURTLES SEEM TO VISIT THE MEDITERRANEAN REGULARLY ALTHOUGH THEY HAVE NO PERMANENT NESTING COLONY. THE MAIN CAUSES OF MORTALITY ARE FISHING ACTIVITIES, COLLISIONS WITH BOATS AND INGESTING FLOATING PLASTIC AND OTHER LITTER

Leatherback Turtle *Dermochelys coriacea*

TAXONOMIC CLASSIFICATION

Class: **Reptilia**
Order: **Testudines**
Family: **Dermochelyidae**
Genus: ***Dermochelys***
Species: ***coriacea***

Average adult length 1.4–1.6 m



IUCN RED LIST

Global status: Critically Endangered

| | |
|---|----|
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Conservation status of resident marine mammals of the Mediterranean and Black Seas



The IUCN Red List of Threatened Species

The Red List Assessment can be applied at both global and regional levels. Due to the different scale of analysis, the regional and global classifications can assign the same species to different categories. For example, a species regionally evaluated as Critically Endangered could be globally evaluated as Least Concern, and vice-versa. Where available, both classifications have been provided for the species evaluated in this booklet. The IUCN Red List Criteria used for assigning species to threatened (i.e. Critically Endangered, Endangered and Vulnerable) categories are indicated in the table on page 30.

1. **EXTINCT (EX):** A taxon is Extinct when there is no reasonable doubt that the last individual has died.
2. **EXTINCT IN THE WILD (EW):** A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range.
3. **REGIONALLY EXTINCT (RE):** Applies to the regional population only. A taxon is Regionally Extinct if it is considered extinct within the region but populations still exist elsewhere in the world.
4. **CRITICALLY ENDANGERED (CR):** A taxon is Critically Endangered when the best available evidence indicates that it is facing an extremely high risk of extinction in the wild.
5. **ENDANGERED (EN):** A taxon is Endangered when the best available evidence indicates that it is facing a very high risk of extinction in the wild.
6. **VULNERABLE (VU):** A taxon is Vulnerable when the best available evidence indicates that it is facing a high risk of extinction in the wild.
7. **NEAR THREATENED (NT):** A taxon is Near Threatened when it is close to qualifying for or is likely to qualify for a threatened category in the near future.
8. **LEAST CONCERN (LC):** A taxon is Least Concern when it is widespread or abundant.
9. **DATA DEFICIENT (DD):** A taxon is Data Deficient when there is inadequate information to make a direct or indirect assessment of its risk of extinction based on its distribution and/or population status.
10. **NOT EVALUATED (NE):** A taxon is Not Evaluated when it has not yet been evaluated against the criteria.
11. **NOT APPLICABLE (NA):** Taxa that have not been assessed because they are unsuitable for inclusion in the regional Red List.

More information regarding the IUCN Red List can be found on the IUCN Red List page: <http://www.iucnredlist.org>

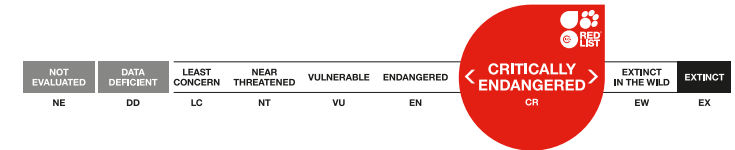
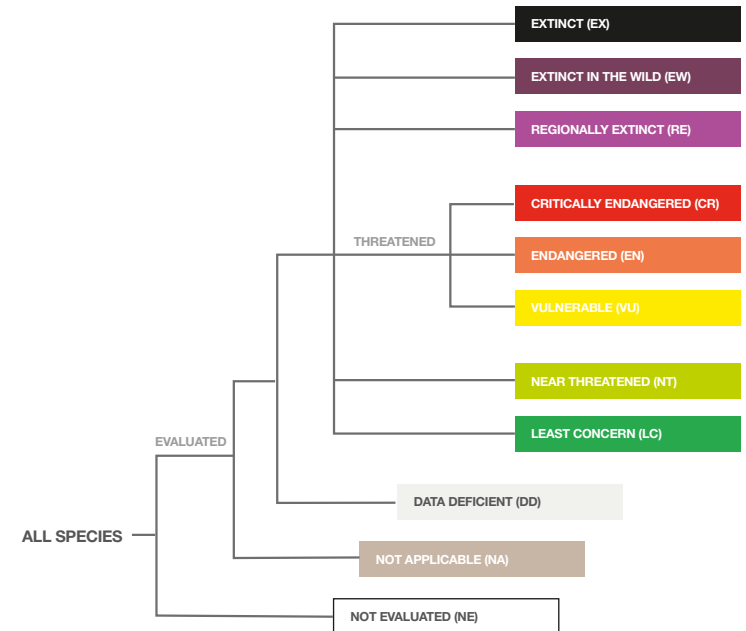


Figure 1 IUCN Red List categories at the regional scale





Regional Red List of resident marine mammals of the Mediterranean and Black Seas

The conservation status of twelve resident species and subspecies of marine mammals from the Mediterranean and Black Sea biogeographical regions was assessed.

MEDITERRANEAN SEA

In all, there are nine resident species of marine mammals that breed and winter in the Mediterranean Sea, which were assessed using the IUCN Red List Criteria (see Table 1). Six of these species are now listed as threatened with extinction (Critically Endangered, Endangered and Vulnerable). The most critically endangered of all the Mediterranean resident species (both regionally and globally) is the Mediterranean Monk Seal, *Monachus monachus*. The population currently consists of about 350–450 animals split into several colonies in different areas, none of which contains more than 50 adults. A population analysis showed that the species has at least a 50% probability of going extinct in the wild within the next 10 years.

Five of the eight resident cetaceans are classified in a threatened category. The Sperm Whale (*Physeter macrocephalus*) and the Short-beaked Common Dolphin (*Delphinus delphis*) are classed as Endangered. The Sperm Whale population, for example, is estimated to number less than 2,500 adult individuals. Three other cetacean species are classed as Vulnerable: the Common Bottlenose Dolphin (*Tursiops truncatus*), the Fin Whale (*Balaenoptera physalus*) and the Striped Dolphin (*Stenella coeruleoalba*). Common Bottlenose Dolphins have experienced a population decline of more than 30% in the last 10 years, and less than 10,000 adult fin whales now exist. All of these species have also suffered very rapid population declines throughout their global range.

The true proportion of threatened species may be even higher, however, as the remaining three resident marine mammals were assessed as Data Deficient, meaning that an evaluation could not be made because not enough information about the species was available. Indeed, if we consider only the species for which sufficient data were available to assess their threat status (i.e. excluding Data

Deficient and Extinct species), all of the resident marine mammals of the Mediterranean and Black Seas assessed and presented in this booklet are threatened with extinction. This highlights the need to improve our knowledge of the species classed as Data Deficient or Not Evaluated. This is also of primary importance for the two marine turtles inhabiting the Mediterranean Sea that are considered Endangered worldwide, and which have not yet been evaluated at the Mediterranean level.

BLACK SEA

The cetaceans in the Black Sea are all of conservation concern as they have a very restricted distribution and are believed to be negatively affected by the depletion of the fish stocks that they feed on and increasing sea pollution. The Black Sea Bottlenose Dolphin (*Tursiops truncatus ponticus*) and Black Sea Harbour Porpoise (*Phocoena phocoena relicta*) are listed as Endangered, and the population of Black Sea Common Dolphins (*Delphinus delphis ponticus*) is in a vulnerable situation.

Table 1 Number of resident marine mammals of the Mediterranean and Black Seas within each category of threat.

| | IUCN Regional Red List Categories | Mediterranean Sea | Black Sea |
|-----------------------|---|-------------------|-----------------|
| Threatened categories | Critically Endangered (CR) | 1 | 0 |
| | Endangered (EN) | 2 | 2 |
| | Vulnerable (VU) | 3 | 1 |
| | Near Threatened (NT) | 0 | 0 |
| | Least Concern (LC) | 0 | 0 |
| | Data Deficient (DD) | 3 | 0 |
| | Total number of species assessed* | 9 | 3 |
| | Total number (and %) of threatened species | 6 (66.7%) | 3 (100%) |

* Excluding the 12 occasional and vagrant cetaceans and the marine turtles



Main threats

The diagram below shows the main threats to the Mediterranean and Black Sea species of marine mammals. The overexploitation of fish stocks ('Food resource depletion'), incidental entanglement of animals in fishing gear ('By-catch and driftnets'), together with the effects of increasing marine pollution, have by far the largest impact on these species. The use of pelagic driftnets, although banned in many Mediterranean countries, still causes injury and death to many animals. Incidental capture in other fishing gear such as trawls, longlines and gillnets, as well as ingestion of marine debris or entanglement in discarded or lost fishing gear, are major additional sources of mortality. Moreover, commercial hunting in the past, particularly in the Black Sea, has slowed the pace of recovery of these small populations.

The increasing amount of plastic debris at sea, oil spills and the dumping of industrial waste into the sea and

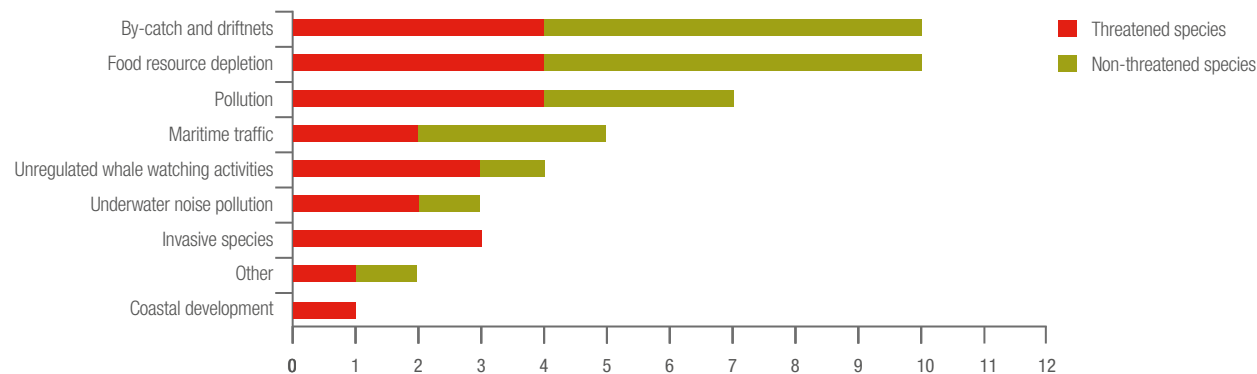
rivers, often with inadequate or no waste water treatment, constitute serious problems for the marine environment. Many such chemicals (including PCBs and other organochlorine pesticides) are toxic to cetaceans and can result in immunological or reproductive disorders. Other toxic substances may bio-accumulate in the body tissues of cetaceans, seals and turtles as a result of the ingestion of contaminated food.

Underwater noise pollution, such as that produced by sonar during military exercises, seismic surveying for oil and gas, shipping and acoustic deterrents, represents the third most important threat, especially for cetaceans. The noises and sound waves produced by certain equipment can interfere with their communication and echolocation systems, often causing physiological disruption, sudden behavioural changes and stress that can lead to death. Both seas, but particularly the Mediterranean, are

subject to a huge amount of maritime traffic, including cargo vessels, ferries, recreational boats and fishing vessels. Ship and boat collisions with cetaceans, seals and marine turtles are common.

Other threats such as global warming, coastal development and the introduction of invasive non-native marine species are affecting the marine fauna in many ways. Unsustainable coastal development can destroy fish nursery grounds, decrease water quality and help propagate invasive species, while tourist activities such as unregulated whale watching can have a serious impact on local seal and cetacean populations.

Figure 2 Major threats to resident marine mammals of the Mediterranean and Black Seas





Conservation measures

The future of marine mammals and turtles will be determined by our current and future actions. The promulgation and implementation of good management plans for the conservation of these species should be an urgent priority. The emphasis should be on improving our existing knowledge and creating a more integrated approach to marine and coastal activities around the Mediterranean. Management of endangered species and their environment can be improved by:

- **Enforcing the existing national and international legislation** on fishing techniques, coastal development, marine resource exploitation and protected sites and species;
- **Increasing efforts to identify and establish conservation areas** that cover the full range of resident or frequently visited sites for the various species of marine mammals and turtles;
- **Taking inventories to assess abundance and changes over time** and to allow potential problems to be identified well in advance;
- **Developing a comprehensive outreach and education strategy** to promote responsible viewing of wild mammals by tourists and commercial operators;
- **Limiting the spread and intensity of noise** by adapting vessels and other marine operational procedures to help to mitigate the effects on cetaceans;
- **Identifying and implementing other specific measures**, such as seasonal closures of fishing areas, reductions in fishing effort in certain fisheries, reduced inputs of particular pollutants, and monitoring for the prevalence of morbillivirus infection.

ENFORCING THE EXISTING NATIONAL AND INTERNATIONAL LEGISLATION, INCREASING EFFORTS TO IDENTIFY AND ESTABLISH CONSERVATION AREAS AND DEVELOPING A COMPREHENSIVE OUTREACH AND EDUCATION STRATEGY TO PROMOTE RESPONSIBLE VIEWING OF WILD MAMMALS BY TOURISTS AND COMMERCIAL OPERATORS ARE AMONG THE MOST IMPORTANT CONSERVATION MEASURES

The Pelagos Sanctuary for Mediterranean Marine Mammals is the largest pelagic protected area in the Mediterranean with an area of about 90,000 km² in the Ligurian, Tyrrhenian and Corsican Seas, partly occupying the waters of France, Italy and Monaco and the adjacent high seas.

International treaties, conventions and agreements

The following are some of the international treaties, conventions and agreements applicable to the protection of marine mammals and turtles in the Mediterranean and Black Sea regions:

- Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS)
 - Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
 - Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention or BCCEW)
 - Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention or CMS)
 - Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention), with the Mediterranean Action Plan (MAP) and the Protocol Concerning Specially Protected Areas and Biological Diversity of the Barcelona Convention (Mediterranean region) (SPA Protocol)
 - International Convention for the Regulation of Whaling (ICRW, the Convention responsible for establishing the International Whaling Commission—IWC)
 - Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention)
 - Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (EU Habitats Directive)
- Some Mediterranean countries also have a National Action Plan or specific legislation for the protection of marine mammals, sea turtles and their critical habitats.
- A summary of the most important international legislation is included in the table on page 30.



Conservation status and international agreements concerning marine mammals and sea turtles of the Mediterranean and Black Seas

| | FAMILY | SCIENTIFIC NAME | IUCN RED LIST CATEGORY AND CRITERIA** | | | | | | RELEVANT INTERNATIONAL AGREEMENTS FOR THE PROTECTION OF WILDLIFE IN THE MEDITERRANEAN AND BLACK SEAS*** |
|------------------|-----------------|-------------------------------------|---------------------------------------|------------------|---------------|------------------|-----------|---|---|
| | | | Global | | Mediterranean | | Black Sea | | |
| | | | Category | Criteria | Category | Criteria | Category | Criteria | |
| PINNIPED | Phocidae | <i>*Monachus monachus</i> | CR | A2abc; C2a(i); E | CR | A2abc; C2a(i); E | | HD: II-IV / CMS: I-II / BCCEW: II / BARCOM: II / CITES: I | |
| | Balaenidae | <i>Eubalaena glacialis</i> | EN | D | | | | HD: IV / CMS: I / BCCEW: II / BARCOM: II / CITES: I | |
| | Balaenopteridae | <i>Balaenoptera acutorostrata</i> | LC | | | | | HD: IV / BCCEW: II / BARCOM: II / CITES: I | |
| | Balaenopteridae | <i>Balaenoptera borealis</i> | EN | A1ad | | | | HD: IV / CMS: I-II / BCCEW: II / BARCOM: II / CITES: I | |
| | Balaenopteridae | <i>Balaenoptera physalus</i> | EN | A1d | VU | C2a(ii) | | HD: IV / CMS: I-II / BCCEW: II / BARCOM: II / CITES: I | |
| | Balaenopteridae | <i>Megaptera novaeangliae</i> | LC | | | | | HD: IV / CMS: I / BCCEW: II / BARCOM: II / CITES: I | |
| | Delphinidae | <i>Delphinus delphis</i> | LC | | EN | A2abc | | HD: IV / CMS: I-II / BCCEW: II / BARCOM: II / CITES: II | |
| | Delphinidae | <i>*Delphinus delphis ponticus</i> | VU | A2cde | | | VU | A2cde | HD: IV / CMS: II / BCCEW: II / BARCOM: II / CITES: II |
| | Delphinidae | <i>Globicephala melas</i> | DD | | DD | | | | HD: IV / BCCEW: II / BARCOM: II / CITES: II |
| | Delphinidae | <i>Grampus griseus</i> | LC | | DD | | | | HD: IV / CMS: II / BCCEW: II / BARCOM: II / CITES: II |
| | Delphinidae | <i>Orcinus orca</i> | DD | | | | | | HD: IV / CMS: II / BCCEW: II / BARCOM: II / CITES: II |
| | Delphinidae | <i>Pseudorca crassidens</i> | DD | | | | | | HD: IV / BCCEW: III / BARCOM: II / CITES: II |
| CETACEANS | Delphinidae | <i>Stenella coeruleoalba</i> | LC | | VU | A2bcde | | | HD: IV / CMS: II / BCCEW: II / BARCOM: II / CITES: II |
| | Delphinidae | <i>Steno bredanensis</i> | LC | | | | | | HD: IV / BCCEW: II / BARCOM: II / CITES: II |
| | Delphinidae | <i>Tursiops truncatus</i> | LC | | VU | A2cde | | | HD: II-IV / CMS: II / BCCEW: II / BARCOM: II / CITES: II |
| | Delphinidae | <i>*Tursiops truncatus ponticus</i> | EN | A2cde | | | EN | A2cde | HD: II-IV / CMS: II / BCCEW: II / BARCOM: II / CITES: I-II |
| | Eschrichtiidae | <i>Eschrichtius robustus</i> | LC | | | | | | HD: IV / BCCEW: III / CITES: I |
| | Kogiidae | <i>Kogia sima</i> | DD | | | | | | HD: IV / BCCEW: II / BARCOM: II / CITES: II |
| | Phocoenidae | <i>*Phocoena phocoena relicta</i> | EN | A1d+4cde | | | EN | A1d+4cde | HD: II-IV / CMS: II / BCCEW: II / BARCOM: II / CITES: II |
| | Physeteridae | <i>Physeter macrocephalus</i> | VU | A1d | EN | C2a(ii) | | | HD: IV / CMS: I-II / BCCEW: II-III / BARCOM: II / CITES: I |
| | Ziphiidae | <i>Hyperoodon ampullatus</i> | DD | | | | | | HD: IV / CMS: II / BCCEW: III / CITES: I |
| | Ziphiidae | <i>Mesoplodon europaeus</i> | DD | | | | | | HD: IV / BCCEW: III / CITES: II |
| | Ziphiidae | <i>Mesoplodon densirostris</i> | DD | | | | | | HD: IV / BCCEW: II / BARCOM: II / CITES: II |
| | Ziphiidae | <i>Ziphius cavirostris</i> | LC | | DD | A2abc; C2a(i); E | | | HD: IV / BCCEW: II / BARCOM: II / CITES: I |
| REPTILES | Cheloniidae | <i>Caretta caretta</i> | EN | A1abd | NE | | | | HD: II-IV / CMS: I-II / BCCEW: II / BARCOM: II / CITES: I |
| | Testudines | <i>Chelonia mydas</i> | EN | A2bd | NE | | | | HD: II-IV / CMS: I-II / BCCEW: II / BARCOM: II / CITES: I |
| | Testudines | <i>Dermochelys coriacea</i> | CR | A1abd | | | | | HD: IV / CMS: I-II / BCCEW: II / BARCOM: II / CITES: I |

ABBREVIATIONS

HD: European Union Habitats Directive
 CMS: Convention on the Conservation of Migratory species of Wild animals (Bonn Convention)
 BCCEW: Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)
 BARCOM: Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention)
 CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora

* Species not evaluated at regional level, but whose regional category coincides with the global one (endemic species).

** For more information about IUCN Red List Categories and Criteria, see: <http://www.iucnredlist.org/technical-documents/categories-and-criteria>

*** Roman numerals indicate the Annexes/Appendices where the species are listed



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For more information about cetaceans, please visit the IUCN/SSC Cetacean Specialist Group website: <http://www.iucn-csg.org>
For more information about marine turtles, please visit the IUCN/SSC Marine Turtle Specialist Group website: <http://iucn-mtsg.org>

POSTER KEY

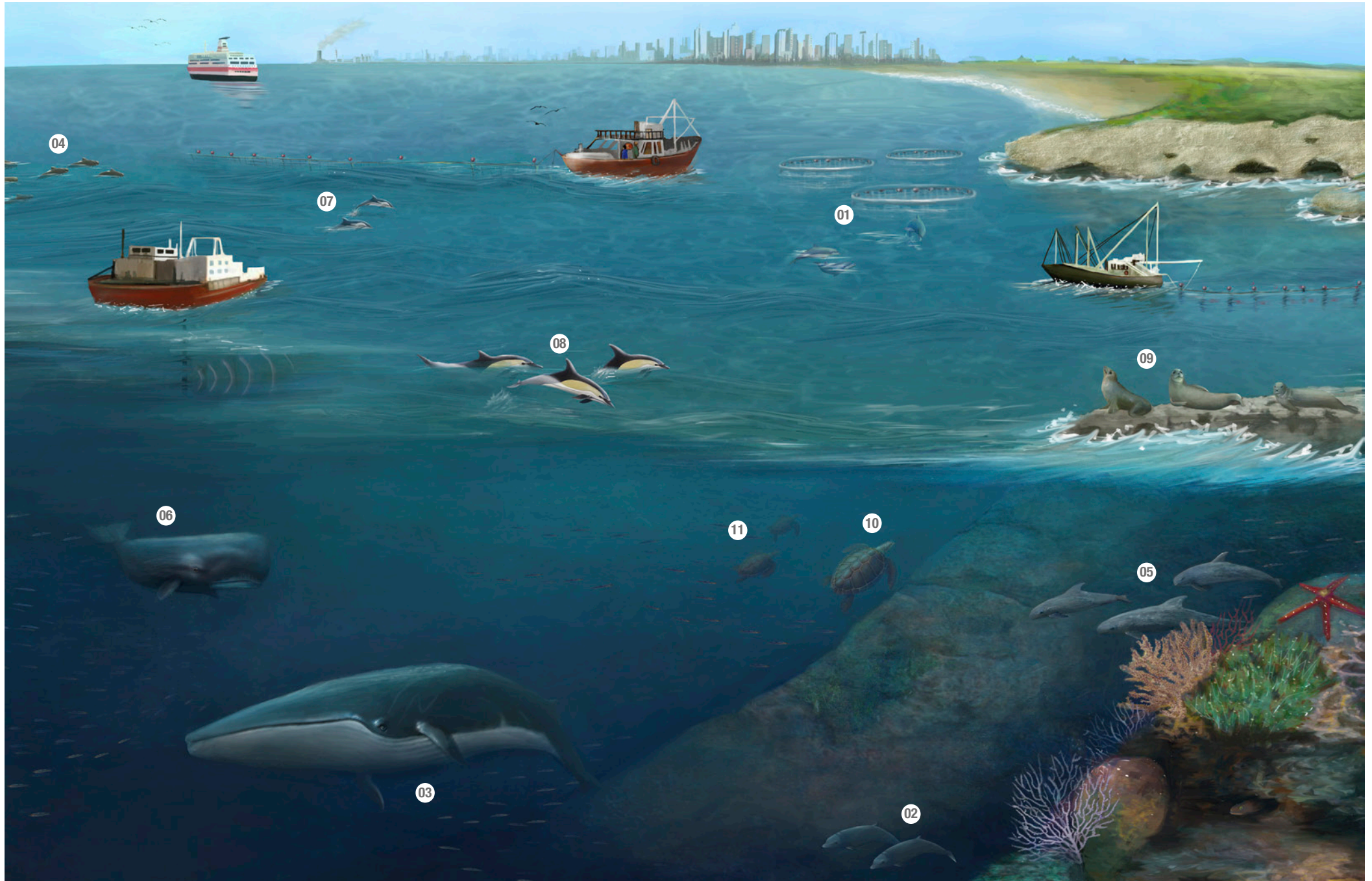
MEDITERRANEAN RESIDENT MARINE MAMMALS AND SEA TURTLES

- 01 Common Bottlenose Dolphin (*Tursiops truncatus*)
- 02 Cuvier's Beaked Whale (*Ziphius cavirostris*)
- 03 Fin Whale (*Balaenoptera physalus*)
- 04 Long-finned Pilot Whale (*Globicephala melas*)
- 05 Risso's Dolphin (*Grampus griseus*)
- 06 Sperm Whale (*Physeter macrocephalus*)
- 07 Striped Dolphin (*Stenella coeruleoalba*)
- 08 Short-beaked Common Dolphin (*Delphinus delphis*)
- 09 Mediterranean Monk Seal (*Monachus monachus*)
- 10 Loggerhead Turtle (*Caretta caretta*)
- 11 Green Turtle (*Chelonia mydas*)



MEDITERRANEAN RESIDENT MARINE MAMMALS AND SEA TURTLES POSTER

See page 32 for details





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