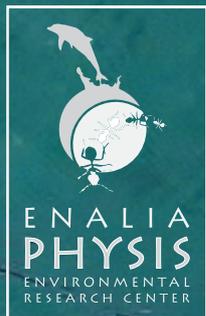


the
**Mediterranean
Monk Seal**

Monachus monachus

Historic background, Status, Threats and Protection



Chronology

The Mediterranean monk seal (*Monachus monachus*) is the only species of seal which is found in the Mediterranean Sea and the sole representative of the genus *Monachus*.

The historical references of the *M. monachus* date back to ancient times, since several classical writers such as Homer, Plutarch, Aristotle, and Pliny the Elder mentioned the species in their texts. The first written report of the species was found in “The Odyssey” by Homer while later it was studied by Aristotle in his work “History of animals”.

In ancient Greece, monk seals were under the protection of the gods Poseidon and Apollo be-

cause the species showed a great love for the sea and the sun.

Seals were a source of inspiration and often starred in myths and legends, not so flattering to the animal, as people held a cynical and hostile attitude towards it, since they believed that it had a deformed body, a strong smell, and a malignant character.

Numerous potteries of the Hellenic civilisation (e.g., amphorae) pictured the Mediterranean monk seal. Also, Greek cities, such as Phocaea - an ancient city of Ionia - took their name from this animal.



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Origin of the name

There are some contradictions in regards to the origin of the Mediterranean monk seal's name. In fact, some authors have argued that the species was named *M. monachus* either because of its fur colour or because of its reclusive lifestyle, unlike other seal species that forming herds.

In ancient Greece, the seal was known simply as ‘phoca’, a word that may have originated from the Sanskrit language (sphâ – inflate) meaning plump or swollen animal.

The common name ‘monk’ seal was introduced by the German Johann Hermann in 1779, who wrote the first modern scientific description after observing a preserved specimen in Strasbourg, Germany. His idea was to name the animal

Münchs-Robbe (*Phoca monachus*), after reading an article describing an animal in Marseilles that bore the local nickname ‘moine’ (monk) and he believed that it must have belonged to the same species.

After two years, in 1781, Thomas Pennant, incorrectly translated the report by Hermann and wrote: “When the animal is placed on its back, the skin of its neck folds like a monk’s hood”. This mistake led to the explanation, which is still given today, that the folds of fat around the neck resemble a monk’s hood, thus justifying the name monk seal.

Species status in the Mediterranean

This species is characterized as the most endangered mammal in the Mediterranean Sea and one of the most endangered in the world. The International Union for Conservation of Nature (IUCN) classified the species in 1984 as one of the twelve most endangered animals in the world.

The total current population of the species is estimated to be fewer than 700 – 800 individuals. The largest sub-population is located in the eastern Mediterranean with 350 – 450 individuals.

Historically, Mediterranean monk seal populations were widely and continuously distributed in the Mediterranean and Black Seas, and in the North Atlantic waters from Morocco to Cabo Blanco, including the Canary Islands, Madeira Islands, and the Azores.

The species' populations decline was due to the systematic hunting in the past and more recently, to the modern human exploitation and invasion to their habitats, as well as the negative interactions resulting from fishing.

This has resulted in the fragmentation of the species' populations, thus creating many small

subpopulations, which makes them extremely vulnerable.

The main sub-populations of the species are found at the Cabo Blanco, Madelra Archipelago and in the eastern Mediterranean.

Today, the Mediterranean monk seal, within the Mediterranean Sea, is found mainly and breeds in the Ionian and Aegean islands, along the coasts of mainland Greece, in Cyprus and in southwestern Turkey. There have also been sporadic sightings of individuals in Syria, Lebanon, Israel, Egypt, Libya, Spain, Italy, Croatia, and Albania.



➤ **2008:** At a species level the Mediterranean monk seal was listed on the IUCN Red List as **Critically Endangered** (CR).

➤ **2015:** A re-assessment listed the species as **Endangered** (EN) since there was evidence for a slight increase of the total population.

The presence of the species is explicitly mentioned in 102 Natura 2000 sites within the European Union (82 sites in Greece, ten in Italy, five in Spain, three in Portugal, and two in Cyprus).

Threats

Some of the threats that the species is facing are:

- Tourism & marine recreational activities
- Coastal development and habitat loss
- Overfishing
- Pollution
- Climate change
- Non-native diseases
- Commercial & industrial areas
- Shipping

As a result of these threats and the past hunting and exploitation, the species was forced to live in isolated coastal caves in order to survive. In fact, historically, the Mediterranean monk seals used to inhabit open beaches for resting, breeding, and social in-

teraction. However, as a consequence of human disturbances on land, today the species mostly uses sea caves for resting, and pupping.

Also, since the 20th century, their persecution by humans and the gradual exploitation of their habitat are largely responsible for changing their behaviour to a less “social” animal, which forced the animal to inhabit isolated caves.

As for the pups, the conditions inside the sea caves are not ideal as they can be washed away from their mother during storms and drown or starve to death.

Species status in Cyprus

1955-58

The last reported reproductive activity.

1959

Monk seals were mentioned as part of the native fauna, but since then the species numbers appear to have steadily declined.

1997 & 2005 – 2006:

Field surveys found the presence of suitable habitats for the Mediterranean monk seal in Cyprus and their occasional presence was documented, but with no reproductive activity.

~2009

The species was on the brink of extinction in the island.

2015~

New births have been documented almost annually, indicating that now, a reproducing Mediterranean monk seal population exist in Cyprus.

Along the 370 km of coastline surveyed, 17 suitable shelters for the Mediterranean monk seal were identified. The areas where most of the Mediterranean monk seals were documented were Paphos - Akamas, Limassol, and Kavο Greko- Kavο Pyla.

It is estimated that approximately 17 - 19 individuals are currently found in Cyprus.

Protection

The Mediterranean monk seal is legally protected throughout its range by numerous national laws and by regional international treaties and conventions, as well as by the amendment of the European Union. In Cyprus it has been protected since 1971 by the Fisheries Law (CHAP. 135) and Regulations 1990 (No. 273/90). It is also included in Annex II of the Protocol of the Barcelona Convention which concerns Specially Protected Areas and the Biological Diversity of the Mediterranean which Cyprus ratified with Law No. 20(III)/2001. The Mediterranean monk seal *Monachus monachus* is considered a priority species in Annex II of the European Habitats Directive (92/43/EEC), the directive was later translated into national legislation (No. 153(I)/2003) in 2003 when the Network Natura 2000 was founded in Cyprus.



General characteristics:

- Size: 2.3 m – 2.8 m
- Adults weight: 240 – 300 kg
- Pups weight: 15 – 26 kg
- Average life span: 20 - 25 years
- Females are sexually mature at minimum age of 3-4 years
- Heterogeneous diet - bony fishes, cephalopods, and crustaceans. In Greece, monk seals are known to eat more than 70 prey species
- Monk seal activity in the marine caves in the eastern Mediterranean is highest in autumn and winter and coincides with the pupping season of the species
- Pups enter the water and begin diving during their first weeks of life and from that point onwards spend 55-74% of their time at sea

History of seal exploitation

Seals were considered as an exploited species since humans first settled the Mediterranean. Hunting of the seals probably remained a constant activity throughout the Classical era and the Hellenistic age. Monk seals were hunted for their fur, leather, meat, and oil, as well as for

medical purposes.

Until the 1980s, livestock breeders on the Greek island of Aegean, Samothrace, used seal fat in rudimentary veterinary care to treat open wounds in farm animals.

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