

LENFEST OCEAN PROGRAM SHARK DECLINES IN THE MEDITERANEAN SEA

FAST FACTS

- Forty-seven species of sharks live in the Mediterranean Sea, of which 20 are considered top predators in coastal and open ocean (pelagic) ecosystems.
- Only 5 of the 20 large predatory sharks were detected at levels of abundance sufficient for analysis. They include 2 mackerel sharks, the blue shark, 1 hammerhead shark, and 1 thresher shark.
- All assessed Mediterranean shark species declined by more than 97 percent in abundance and biomass, or catch weight, over the last 150–200 years across the considered portion of the Mediterranean Sea.
- The rates of shark decline in the Mediterranean are higher than those for comparable species in the Gulf of Mexico and similar trends in the Northwest Atlantic Ocean.
- The mean size of sharks caught in the Mediterranean is among the lowest in the world.
- The study reveals a relative faster decline of biomass than abundance over time. This would imply a declining presence of mature specimens with detrimental effect on the reproductive potential of these species.
- Historically, large sharks occurred throughout the Mediterranean Sea. In recent decades, however, large sharks seemed to be restricted to the eastern and southern Mediterranean coast or to offshore open waters.
- The Mediterranean Sea has a long history of marine resource use. Its fisheries have traditionally targeted many high-value species, including tuna and swordfish.
- In the 19th and early 20th Century, sharks were considered a pest for many fisheries.
- In the early 20th Century many coastal fisheries targeted sharks or landed them as bycatch.
- There are currently no catch limits for commercially-fished shark species in the Mediterranean Sea.

SHARK SPECIES

Hammerhead Sharks

- Of the 5 species analysed, hammerhead sharks have declined the fastest.
- After 1995 no records of hammerhead sharks could be found.
- The records show an estimated 99.99% decline for the hammerhead shark.

Blue Sharks

- In the North Ionian Sea, landings of the blue shark declined by 73.76% in abundance and 83.01% in biomass, whereas in Spanish waters it declined by 99.78% in biomass.
- Over the past 56 years, the blue shark has declined by 96.53% in abundance.
- Over the past 49 years, the blue shark has declined by 99.83% in biomass.

Mackerel Sharks

• The mackerel shark has declined by more than 99.99% in both abundance and biomass in the last over the last 100 years.

Thresher Sharks

- The thresher shark is the only species detected in coastal waters in recent times.
- Overall though, the species by declined by more than 99.99% over the last 100 years.