

PRESENTS

GREAT HAMMERHEAD

Sphyrna mokarran

The great hammerhead shark is the largest species in the hammerhead shark group, the Sphyrnidae family. Its name comes from the Greek "Sphyrna," which means hammer, and "mokarran," an Arabic name meaning large. Although their abundance could not support a commercial fishery, the great hammerhead has gained importance in the tourism industry worldwide as it has become the main attraction for many divers seeking the opportunity to swim alongside them.

TAXONOMY

Kingdom: Animalia
Phylum: Chordata
Class: Chondrichthyes
Subclass: Elasmobranchii
Order: Carcharhiniformes
Family: Sphyrnidae
Genus: *Sphyrna*
Species: *S. mokarran*



9 SPECIES of hammerhead sharks in the world.

Distribution: Tropical and subtropical waters of the world.

Diet: Carnivorous; feeds on fish, smaller sharks, crustaceans and cephalopods.

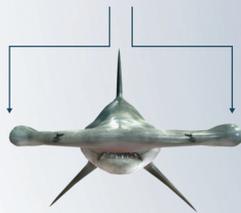
Predators: Adults can be attacked by orcas; juveniles are hunted by other larger sharks (like bull sharks).

Reproduction: Viviparous; usually are born during late spring and early summer. They can reproduce every two years.

Head is almost straight in the shape of a T, hence the name hammerhead.

Nostrils

Width of head is ~23-27% of total body length.



11 months duration of gestation period.

Ampullae of Lorenzini in the ventral side of the head.



Ampullae of Lorenzini: Electoreceptor organs that help detect weak electrical fields produced by other animals.



13-42 average number of pups per litter.

Mouth located on ventral side of head.

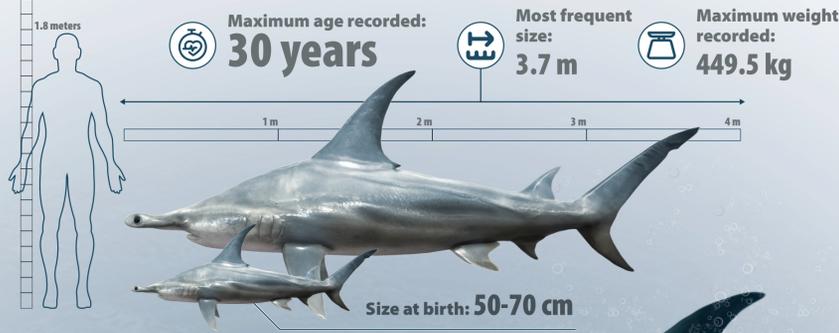


Teeth are triangular and serrated.

16-17 rows of teeth on upper jaw.

ANATOMY

Females tend to be larger than males.



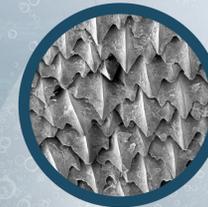
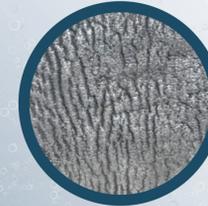
Eyes located at the ends of the head.

The first dorsal fin is tall and sickle-shaped.

Skin is covered with placoid scales.

COLORATION

The dorsal side is dark gray or brown, with a white underside.



Placoid scales: Also called dermal denticles, they reduce water resistance to make swimming more efficient.

Second dorsal fin is large.

Pectoral fins located behind the gills.

BEHAVIOR

>100 sharks have been seen forming aggregations in sea mounts.

It is a nocturnal and solitary hunter.

It is a migratory species.

1-300 m Depth range it prefers.

ECOLOGICAL IMPORTANCE

As a top predator, it helps control its prey-s populations.

Its presence is an indicator of good ecosystem health.

70% Estimated decrease of its population worldwide.



Field of vision of almost **360°**

1.5 km distance at which it can detect one drop of blood.

CONSERVATION TIMELINE

- 1931-41:** During the 2nd World War, demand for shark oil increased as it was used as diet supplement for soldiers.
- 2004:** Conapesca and INP published the National Conservation and Management Plan for Sharks and Rays in Mexico.
- 2007:** The great hammerhead is categorized as threatened (EN) in the IUCN's Red List.
- 2007:** Mexican government publishes NOM-029-PESC-2006 which regulates fishing for rays and sharks and prohibits finning.
- 2012:** Mexico establishes a yearly 3-month ban for all shark fisheries.
- 2013:** Hammerhead sharks are included in CITES' Appendix II.
- 2019:** The IUCN changes the species' Red List status to Critically Endangered (CR).

THREATS

ENVIRONMENTAL DEGRADATION
Human activities or climate change are altering the conditions needed for populations to remain healthy.

ILLEGAL, UNREPORTED & UNREGULATED FISHING
Fisheries management, conservation and enforcement vary between countries.

FINNING
Although banned in many countries, demand for shark fins for medicinal and culinary purposes continues to exist.

Mexico Marino is a collaboration between Fundación Coppel, Mares Mexicanos and dataMares.

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