



SHARKS OF INDIA

Sharks are diverse cartilaginous fish found in India's coastal, oceanic, and deep-sea waters, with over 100 species inhabiting various ecosystems like coral reefs and deep-sea trenches. As members of the subclass Elasmobranchii, they have cartilaginous skeletons, replaceable teeth, and advanced sensory systems for detecting prey. Sharks have thrived for over 400 million years, playing a critical role in regulating prey populations and maintaining balance in the food web. However, they face significant threats from overfishing, habitat degradation, and climate change, and their slow growth and low reproductive rates make them particularly vulnerable.

DIET

Sharks exhibit diverse feeding strategies, reflecting their role in marine ecosystems. The diets vary based on species, habitat, and adaptations. Apex predators like the Tiger shark (*Galeocerdo cuvier*), hunt fish, cephalopods, turtles, and even seabirds. Mid-level predators such as the Blacktip shark (*Carcharhinus limbatus*), feed on smaller fish and crustaceans. Filter feeders like the Whale shark (*Rhincodon typus*), consume plankton and small fish by straining water. Benthic feeders including Carpetsharks (*Chiloscyllium spp.*), target bottom-dwelling invertebrates using suction jaws.

REPRODUCTIVE BIOLOGY

Sharks reproduce through three main strategies: Oviparous species, like Zebra (*Stegostoma tigrinum*) and Bamboo sharks (*Chiloscyllium spp.*), lay protective egg cases known as mermaid purses; Viviparous species, such as Bull sharks (*Carcharhinus leucas*), nourish their pups via a placental connection and give birth to fully developed young; and Ovoviviparous species, like Tiger sharks (*Galeocerdo cuvier*), develop embryos in eggs within the mother, hatching internally before live birth. Due to their slow growth, late maturity, and low reproductive output, sharks are particularly vulnerable to overfishing.

Whale Shark

DISTRIBUTION

Sharks in India inhabit coastal waters, coral reefs, open ocean, deep-sea trenches, and some freshwater systems. Coastal and reef species are agile and utilize camouflage and heightened electroreception to detect prey. Pelagic sharks have streamlined bodies and large fins for efficient long-distance travel. Deep-sea sharks adapt to extreme pressure and darkness using bioluminescence and sensitive vision. Some can also tolerate freshwater, migrating between rivers and marine habitats by regulating salt levels.

Blacktip Reef Shark

Gulper Shark

