



## BATOIDS OF INDIA

Batoids, a group of cartilaginous fish in the subclass Elasmobranchii, include rays, skates, wedgefishes, guitarfishes. Rays are recognized by their flattened bodies and pectoral fins, while wedgefishes and guitarfishes have elongated bodies and triangular snouts. Sawfishes are bottom-dwelling predators with unique toothed rostrums. Batoids play essential roles in marine food webs; most rays and sawfishes are benthic foragers, with some rays acting as filter feeders.

Despite their ecological importance, batoids are among the most threatened marine vertebrates, facing high risks from fishing for their fins, meat, and gill plates. Sawfishes, wedgefishes, and guitarfishes are particularly targeted in the shark fin trade. Bycatch and habitat loss further threaten their populations, and their slow reproduction and late maturity make conservation efforts crucial for their survival.

## DIET

Batoids exhibit diverse feeding strategies based on their habitat and morphology. Benthic feeders like the Jenkins' whipray (*Pateobatis jenkinsii*) consume crustaceans and small fish from the seabed. Mid-water hunters, such as the Pelagic stingray (*Pteroplatytrygon violacea*), chase small schooling fish and cephalopods. Filter feeders like the Spinetail devil ray (*Mobula mobular*) use gill rakers to extract plankton from the water. Suction feeders, including the Widenose guitarfish (*Glaucostegus obtusus*), employ oral suction to unearth prey from sandy and muddy substrates.

## **REPRODUCTIVE BIOLOGY**

Batoids exhibit two primary reproductive strategies: oviparous species, such as the Indian ringed skate (*Orbiraja powelli*), lay tough, leathery egg cases known as mermaid's purses, while ovoviviparous species, like the Bowmouth guitarfish (*Rhina ancylostoma*), retain embryos inside egg capsules that hatch just before birth without a placental connection. With their slow reproductive rates, batoids are highly susceptible to population declines.



## DISTRIBUTION

Batoids in India inhabit diverse environments such as coastal waters, coral reefs, the open ocean, deep-sea floors, and estuarine systems, with each habitat influencing their adaptations. Coastal and reef species are agile, utilizing flattened bodies and wing-like pectoral fins for ambushing prey. Pelagic rays have large fins to travel great distances. Deep-sea batoids are adapted to harsh conditions with reduced skeletal density and enhanced electroreception for locating prey in darkness. Some species, like Sawfish and certain stingrays, can thrive in estuarine and freshwater environments due to specialized osmoregulatory mechanisms.

Manta Ray



