

# Apex to absence- The decline of Hammerhead Sharks

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There are ten known species of Hammerhead Shark, nine belong to the genus *Sphyrna* and only one belongs to the genus *Eusphyra* (Ocean Conservancy, 2024) The species are as follows:

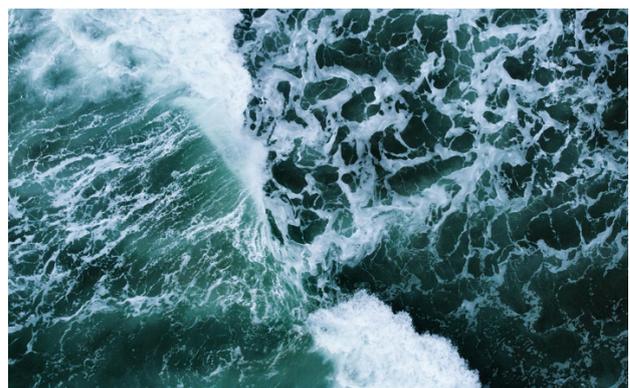
- Great Hammerhead (*Sphyrna mokarran*)
- Scalloped Hammerhead (*Sphyrna lewini*)
- Smooth Hammerhead (*Sphyrna zygaena*)
- Bonnethead Shark (*Sphyrna tiburo*)
- Scalloped Bonnethead (*Sphyrna corona*)
- Scoophead (*Sphyrna media*)
- Smalleye Hammerhead (*Sphyrna tudes*)
- Carolina Hammerhead (*Sphyrna gilberti*)
- Whitefin Hammerhead (*Sphyrna couardi*)
- Winghead Shark (*Eusphyra blochii*)

Hammerhead Sharks are widely distributed across the world and are often found in the Pacific, Atlantic and Indian oceans. They prefer warmer and tropical waters and are highly migratory with some species travelling to cooler waters in summer and warmer waters during winter (See The Wild, 2022). Sadly, the majority of these species are listed as either critically endangered, endangered or vulnerable on the IUCN Red List (2025).

As children we are taught to fear sharks, they are portrayed as blood thirsty predators that hunt humans, cinema has displayed them as monsters but the real monsters, are humans. Hammerhead Sharks have faced countless threats and challenges to their survival. Significant threats include the shark fin trade, industrial fishing, capture stress, habitat loss, plastic pollution, shark liver oil trade and slow reproduction (Migueluez, 2023).

Even though all species of Hammerhead Shark in the family *Sphyrnidae* are covered under CITES Appendix II (CITES, 2022), illegal trade has still occurred. This shows that legislation and regulation is not enough, it must be backed by strict enforcement which is unfortunately lacking. Lack of enforcement opens loopholes and gaps for people to exploit.

A study conducted by Cardeñosa *et al.*, (2025) used data collected from 2014-2021 on DNA analysis from over 20,000 shark fin samples found in Hong Kong markets, and examinations of trade records from this time. Though legal trade was extremely low, their research found four out of five species of shark listed under CITES Appendix II within these markets, proving illegal trade is still booming.



Hammerhead sharks are also threatened by unsustainable, industrial scale fishing practices and may be targeted directly or may be victims of by-catch. Industrial scale fishing is hugely problematic as sharks are caught faster than they are able to reproduce. The average gestation period across the Hammerhead species is between 9-12 months and litter sizes can be between 12-40 pups (Galapagos Conservation Trust, 2026). Females only breed once every two years, this slow reproductive process combined with over-exploitation through intense fishing is highly problematic for population recovery.

Pregnant females rely heavily on coastal habitats such as mangroves, lagoons, estuaries and river mouths to give birth to their live young. These habitats also serve as nurseries for infant sharks to develop for the first few years of their life as the mothers leave immediately after birth. These habitats provide vital resources for young pups, however many of these habitats are declining.

More than 50% of the world's mangroves are at risk of collapse (IUCN, 2024), they are threatened by intense anthropogenic activities such as coastal development, deforestation and aquaculture. Young Hammerhead pups are already incredibly vulnerable to predation from larger species and even from adult Hammerheads, combining this with extreme and unregulated practices makes it very difficult for shark populations to recover.



The Bimini Biological Field Station Foundation (BBFSF) was established in 1990 by Dr. Samuel Gruber. They have conducted vital research and conservation projects around Florida and the Bahamas, these include the creation of a vast catalogue of visual ID's of Hammerhead Sharks over the course of a decade. They also conduct research on habitat use, predator and prey dynamics, vertical space use and the effects of the provision of food on their small scale movement (BBFSF, 2026). This combination of capture and release, and observational methodology has led to a greater understanding of Hammerheads and the creation of the catalogue enables researchers to track and monitor populations as well as gather key behavioural data.

The Galapagos Marine Reserve (GMR) is a crucially important place for a number of shark species including the Scalloped Hammerhead, the reserve is one of very few places where large quantities can still be found. Research found that Hammerheads (amongst other shark species) had nursery areas in the GMR and so in 2023 the nurseries were designated one of IUCN's Important Shark and Ray Areas. The Galapagos Conservation Trust has developed the Endangered Sharks of the Galapagos programme which aims to continue the development of their research on migratory species such as the Hammerhead and Whale shark, continue to advocate and provide evidence to see that at least 30% of Ecuadorean waters are protected and to help better protect the nursery sites within the GMR (Galapagos Conservation Trust, 2026).

These are just two examples of countless incredible organisations, all of which are providing vital data, research and education about the amazing Hammerhead Shark. Some are focusing efforts to educate people about their behaviour and contributions to the ecosystem, some are advocating for better protection for them and their habitats and others are conducting research projects to inform better practices. Ultimately their goals are all the same, to protect, conserve and defend the Hammerhead Shark and end the cruel and exploitative practices that cause catastrophic suffering for this species.

**Reference list:**

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