

SHARK DATA LAB · SHARKDATALAB.COM

Sharks: a field guide

Every species in the Shark Data Lab database, with the marks that tell them apart



Sample · 2026 edition · 3 species

Data as of 13 September 2026

Cover photo: Bull Shark · João D'Andretta · CC BY 4.0

How to use this guide

This guide covers every living shark species in the Shark Data Lab database: the species implicated in recorded incidents worldwide, their close relatives, and the sharks most often met by divers, surfers, anglers and swimmers. It is written for people in and around the water, not for taxonomists.

Species are grouped by order and family, because that is how sharks actually resemble each other. When a report says only "hammerhead" or "wobbegong", the family chapter is where to look. Each family chapter opens with a comparison table of its members.

Each species page gives 3 to 5 identification marks you can check on a living animal, then the species it is most often confused with and the one difference that settles it. Marks come from the published descriptions of each species; a mark the sources do not support is left out rather than guessed.

Incident counts are taken from the Global Shark Attack File and joined to species by name. Witness identifications are often uncertain, so read them as recorded incidents, not authoritative totals. Incidents recorded only at group level ("a hammerhead") are shown separately and never attributed to a species.

Sizes are maximum recorded lengths. Ranges are indicative: the map highlights the ocean basins and seas where the species is regularly recorded. IUCN Red List categories are the latest assessment at the time of writing.

Sources: World Register of Marine Species (taxonomy and synonyms), IUCN Red List via GBIF (conservation status), Global Shark Attack File (incidents), published species descriptions and encyclopaedic accounts (biology and marks). Photographs are reproduced under the licence stated in the credits at the end.

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Scalloped Hammerhead

Sphyrna lewini

CR · Critically Endangered

1 recorded · 0 fatal

Recognizable by the scalloped front edge of its cephalofoil. Forms large daytime schools of hundreds of individuals — one of the few sharks to do so. Critically endangered due to the global fin trade and bycatch.



Photo: Kris-Mikael Krister · CC BY 2.0

AT A GLANCE

MAX LENGTH	4.3m
DIET	Bony fishes, sharks, rays, and invertebrates.
REPRODUCTION	Scalloped hammerhead sharks have long gestation periods (8 to...
LITTER	14 to 26
DESCRIBED	Griffith & Smith, 1834

IDENTIFICATION

- 1

Hammer-shaped head (cephalofoil) with three scalloped indentations across its front edge — the central notch is the key mark.
- 2

Light grey to bronze above, white below; dusky or black-tipped pectoral fins and dark blotch on lower tail lobe.
- 3

Large, slightly hooked first dorsal fin; smaller second dorsal fin.
- 4

Up to 4.3 m; most commonly seen near shore, in bays, or over continental shelves, often in large daytime schools.

NOT TO BE CONFUSED WITH

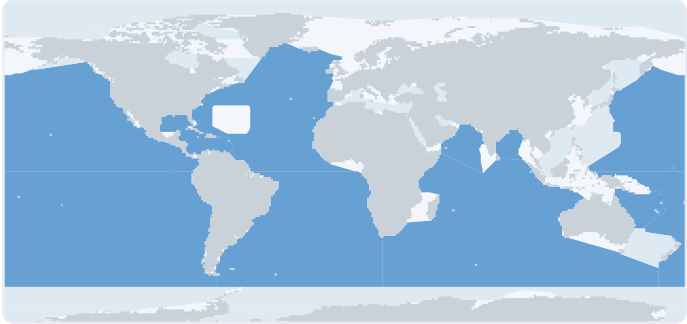
- ≠

Great Hammerhead (*Sphyrna mokarran*) — Great hammerhead has a nearly straight cephalofoil front edge with no scalloping, and a much taller first dorsal fin; grows larger to 6.1 m.
- ≠

Smooth Hammerhead (*Sphyrna zygaena*) — Smooth hammerhead's cephalofoil front edge is smoothly arched with no central indentation or scalloping; pectoral fin tips are dusky, not black-tipped.
- ≠

Carolina Hammerhead (*Sphyrna gilberti*) — Carolina hammerhead is virtually identical in shape but has a lower vertebral count and is only confirmed in the western Atlantic; not reliably separated without examination.

WHERE IT LIVES



Scalloped hammerhead sharks are found world-wide in warm temperate and tropical seas. They are a migratory, schooling, coastal-pelagic, semi-oceanic species that travel within the EEZ of many...

Habitat. These sharks prefer to be over continental and insular shelves, adjacent to deep water. They can range from the surface to...

PEOPLE AND THIS SHARK

Capable of injury given its size, but timid and rarely implicated — divers usually find schooling scalloped hammerheads shy and hard to approach. 49 more incidents say only "hammerhead (species not confirmed)" and are not attributed to any species.

RECORDED INCIDENTS

1	0	1968
RECORDED	FATAL	YEARS
Most recorded in South Africa (1)		

Bull Shark

Carcharhinus leucas

VU · Vulnerable

275 recorded · 57 fatal

One of the most dangerous sharks due to its aggression, territorial behavior, and unique ability to survive in both salt and freshwater. Responsible for many attacks in murky coastal and river waters worldwide.



Photo: João D'Andretta · CC BY 4.0

AT A GLANCE

MAX LENGTH	3.4m
DIET	The shark feeds primarily on bony fishes, but it is a versatile and...
REPRODUCTION	Viviparous, with yolk-sac placenta
LITTER	1 to 13
BIRTH SIZE	81cm
DESCRIBED	Valenciennes, 1839

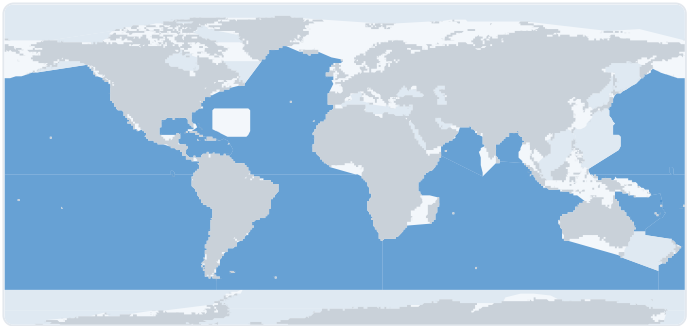
IDENTIFICATION

- 1 Very stocky, heavy build — wider and heavier than other requiem sharks of the same length.
- 2 Short, broad, flat snout; no interdorsal ridge.
- 3 Plain grey above, white below; no prominent fin markings on adults.
- 4 Second dorsal fin noticeably smaller than the first.
- 5 Shallow coastal water and rivers — the only large shark regularly found far upstream in freshwater.

NOT TO BE CONFUSED WITH

- ≠ **Pigeye Shark** (*Carcharhinus amboinensis*) — Pigeye shark is nearly identical in shape and colour; ranges overlap but pigeye is rarely found in freshwater and has small circular eyes.
- ≠ **Dusky Shark** (*Carcharhinus obscurus*) — Dusky shark is similar grey colour but has an interdorsal ridge and a more streamlined, less stocky body than the bull shark.

WHERE IT LIVES



Tropical and subtropical shallow coastal waters worldwide. This species has the ability to penetrate fresh water; it has been caught 2,294 miles [3,691 km] up the Amazon River in Peru, 340 miles [547...

Habitat. Usually found close inshore in water less than 100 ft [30m] deep.

PEOPLE AND THIS SHARK

This is a large, aggressive shark with massive jaws and it moves like a seasoned warrior. The GSAF has several cases in which the rapid ascent of a diver may have 'released' an aggressive response (similar to when an intruder flees from a guard dog). In each case, after a single bite on the diver's leg (no tissue was removed by the shark), the shark sped back t... 31 more incidents say only "requiem shark (species not confirmed)" and are not attributed to any species.

RECORDED INCIDENTS

275

RECORDED

57

FATAL

1880–
2026

YEARS

Most recorded in United States (88) · Australia (57) · South Africa (20)

Spotted Wobbegong

Orectolobus maculatus

No recorded incident names this species.

A highly camouflaged ambush predator of Australian coastal reefs. Uses elaborate skin flaps and a mottled pattern to blend into the seafloor. Responsible for a small number of incidents, nearly always when inadvertently stepped on.



AT A GLANCE

MAX LENGTH	1.25m
DIET	Bottom fish and invertebrates
REPRODUCTION	Ovoviparous
DESCRIBED	Bonnaterre, 1788

IDENTIFICATION

- 1 Flat, broad body covered in green, yellow, or brown tones with a meshwork of lines and distinctive O-shaped spots.
- 2 Head fringed with dermal lobes and large barbels extending from nostrils; six to ten lobes around each eye.
- 3 Grows to 150–180 cm, occasionally larger; large and robust compared to most other wobbegongs.
- 4 Rests motionless on rocky reefs, seagrass, or sandy bottoms by day; active at night.
- 5 Endemic to Australian waters; found from shallow inshore reefs to at least 176 m depth.

NOT TO BE CONFUSED WITH

- ≠ **Ornate Wobbegong** (*Orectolobus ornatus*) — Ornate wobbegong lacks the distinctive O-shaped spots; spotted wobbegong has more dermal lobes and white marks on its body.
- ≠ **Tasselled Wobbegong** (*Eucrossorhinus dasypogon*) — Tasselled wobbegong has an elaborate beard of branching tassels around the head; spotted wobbegong has simpler, unbranched dermal lobes.
- ≠ **Banded Wobbegong** (*Orectolobus halei*) — Banded wobbegong lacks the O-shaped spots and has fewer dermal lobes; spotted wobbegong also has distinctive white marks absent in the banded wobbegong.

WHERE IT LIVES



Western Pacific, including New Guinea and northern Australia.

Habitat. Tropical inshore reefs and tidepools.

PEOPLE AND THIS SHARK

Usually unaggressive unless provoked.

64 more incidents say only "wobbegong (species not confirmed)" and are not attributed to any species.

RECORDED INCIDENTS

0	0	—
RECORDED	FATAL	YEARS

Get the full guide

This sample shows 3 of the species pages. The full guide covers every living shark species in the Shark Data Lab database, grouped by family, with identification marks, look-alikes, range maps and incident records for each.

www.sharkdatalab.com/en/guide

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Scalloped Hammerhead — Kris-Mikael Krister, CC BY 2.0 · commons: File: Scalloped_hammerhead_shark_(Sphyrna_lewini)_Costa_Rica_(cropped).jpg

Spotted Wobbegong — Rick Stuart-Smith / Reef Life Survey, CC BY 4.0 · commons: File:Orectolobus_maculatus_cod_ground.jpg

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Bull Shark — João D'Andretta, CC BY 4.0 · commons: File:Bull_shark_(Carcharhinus_leucas).jpg