

= Smoothtooth blacktip shark =

The smoothtooth blacktip shark (*Carcharhinus leiodon*) is a species of requiem shark , in the family Carcharhinidae . It is known only from the type specimen caught from the Gulf of Aden , off eastern Yemen , and a handful of additional specimens caught from the Persian Gulf , off Kuwait . Reaching 1 @.@ 2 m (3 @.@ 9 ft) in length , this species has a stocky greenish @-@ colored body , a short snout , and black @-@ tipped fins . It can be distinguished from similar species by its teeth , which are narrow , erect , and smooth @-@ edged .

Little is known of the smoothtooth blacktip shark 's natural history ; it likely inhabits shallow waters and feeds on small bony fishes . It is presumably viviparous like other members of its family . The International Union for Conservation of Nature (IUCN) last assessed this species as Vulnerable , when only the sole type specimen was known . Although more specimens have since been discovered , the conservation status of this species remains precarious due to heavy fishing and habitat degradation within its range .

= Taxonomy and phylogeny =

The first known specimen of the smoothtooth blacktip shark was a 75 cm (30 in) long immature male caught by Wilhelm Hein in 1902 and deposited at the Naturhistorisches Museum in Vienna . The location was recorded as the Gulf of Aden near " Gischin " , which likely refers to the town of Qishn in eastern Yemen . In 1985 , the shark was examined and described as a new species by New Zealand ichthyologist Jack Garrick in a National Oceanic and Atmospheric Administration (NOAA) Technical Report . He gave it the specific epithet *leiodon* , from the Greek *leios* meaning " smooth " , and *odon* meaning " tooth " . This species was known only by the single specimen until 2008 , when fishery surveys in Kuwait uncovered several more specimens .

Based on morphology , Leonard Compagno in 1988 tentatively grouped the smoothtooth blacktip shark with the spinner shark (*C. brevipinna*) , the blacktip shark (*C. limbatus*) , the graceful shark (*C. amblyrhynchoides*) , and the finetooth shark (*C. isodon*) . Using molecular phylogenetic techniques on mitochondrial DNA sequences , Alec Moore and colleagues reported in 2011 that this species is closely related to the graceful shark , the blacktip shark , and the Australian blacktip shark (*C. tilstoni*) .

= Description =

Superficially , the smoothtooth blacktip shark resembles the blacktip reef shark (*C. melanopterus*) . It is rather robust in build , with a short and blunt snout . The large nostrils are preceded by well @-@ developed , triangular flaps of skin . The small , circular eyes are equipped with nictitating membranes . The mouth forms a wide arch and has very short furrows at the corners . There are 16 upper and 14 ? 15 lower tooth rows on either side , along with two to three small teeth at the symphysis (center) of either jaw . The teeth are distinctive in shape , having narrow , upright cusps without serrations ; finetooth sharks and juvenile spinner sharks are the only other members of *Carcharhinus* with similar teeth . The five pairs of gill slits are long .

The fairly long and pointed pectoral fins are slightly falcate (sickle @-@ shaped) and originate between the fourth and fifth gill slits . The first dorsal fin is medium @-@ sized and triangular with a pointed apex , and originates over the rear of the pectoral fin bases . The second dorsal fin is small and positioned opposite the anal fin . There is no ridge between the dorsal fins . The pelvic fins are triangular and larger than the anal fin , which has a deep notch in the trailing margin . A crescent @-@ shaped notch is present on the caudal peduncle at the upper caudal fin origin . The caudal fin is asymmetrical , with a well @-@ developed lower lobe and a longer upper lobe with a ventral notch near the tip . The dermal denticles are slightly overlapping and bear three prominent horizontal ridges leading to three or five marginal teeth . This species is greenish yellow to greenish gray above , sometimes with a scattering of tiny dark dots . The underside is white , which extends in a pale band onto the flanks . All the fins have sharply defined black tips , and there is a broad ,

dark midline stripe running from the second dorsal fin base to the tip of the upper caudal fin lobe . The largest recorded specimen is 1 @. @ 2 m (3 @. @ 9 ft) long .

= = Distribution and habitat = =

The smoothtooth blacktip shark has only been recorded from eastern Yemen and Kuwait , some 3 @, @ 000 km (1 @, @ 900 mi) apart . These two locations differ markedly : the Gulf of Aden near Yemen is over 2 @. @ 5 km (1 @. @ 6 mi) deep with a narrow continental shelf and no permanent riverine inputs , while the Persian Gulf near Kuwait is entirely shallower than 40 m (130 ft) and receives abundant freshwater from the Tigris @-@ Euphrates @-@ Karun river system . The Kuwait specimens were obtained from fish markets ; given the practices of Kuwaiti speedboat fishers , this shark can be supposed to inhabit shallow , coastal waters . Still , these waters encompass a range of habitats from estuaries to coral reefs , and thus the habitat requirements of the smoothtooth blacktip shark remain largely unknown .

= = Biology and ecology = =

Considering its resemblance to the blacktip reef shark , the smoothtooth blacktip shark may play an equivalent shallow @-@ water ecological role within its range . It is known to feed on marine catfish , and its diet probably also includes other small bony fishes . This species is presumably viviparous like all other *Carcharhinus* species , with the developing young sustained to term by a placental connection to the mother . Judging from the available specimens , males reach sexual maturity at some point between 0 @. @ 9 and 1 @. @ 2 m (3 @. @ 0 and 3 @. @ 9 ft) long .

= = Human interactions = =

Prior to the finding of additional specimens in Kuwait , the International Union for Conservation of Nature (IUCN) assessed the smoothtooth blacktip shark as Vulnerable based on its presumed small range and population . Despite the discovery of a second subpopulation off Kuwait , this species likely still warrants a Vulnerable assessment (or higher) because the waters around the Arabian Peninsula are subject to heavy fishing pressure and habitat degradation . Gillnet and other fisheries off Kuwait are known to take the smoothtooth blacktip shark as bycatch , while intensive Yemeni and Somali shark fisheries operate in the Gulf of Aden . The status of the Yemen subpopulation is uncertain because no further specimens have been recorded since the original over a century ago .