

Common Name: **Sand tiger shark**



Scientific Name: *Odontaspis taurus*

Area of Concern: Western Atlantic - south Atlantic, Gulf of Mexico, Caribbean

Year First Listed as a "Species of Concern": 1997

Species Description:

The sand tiger shark is characterized by: two dorsal fins of similar size (base of first dorsal just in front of pelvic-fin bases); short, asymmetric caudal fin with a pronounced subterminal notch and short but strong ventral lobe); 5 medium gill slits in front of pectoral-fin bases; lack of gill rakers; very short snout; and small eyes without nictating membranes. They are light grey-brown above in color, whiter below with yellow/yellowish blotches. The teeth, which are similar in both jaws, are long and pointed, with a small spine-like cusp on either side. Maximum length is about 318 cm TL. Sand tiger sharks may occur singly or in small schools and are active mostly at night. They are generally coastal, usually found from the surf zone down to depths around 75 feet. However, they may be found in shallow bays, around coral reefs and to depths of 600 feet on the continental shelf. They usually live near the bottom, but have been found throughout the water column. Sexual maturity for males is reached at the size of 2 m or 4-5 years; females mature at 2.2 m or 6 years. The species is ovoviviparous (young develop as unattached embryos within the uterus, with energy supplied by large egg yolks). In North America, mating is thought to occur in alternate years between late March and the April with an average litter of 1-2 pups. The reproductive cycle is at least 2 years. Prey items include a wide variety of bony fishes, small sharks, rays, squid, crabs and lobsters.

Rationale for "Species of Concern" Listing:

Demographic and Diversity Concerns:

Sand tiger sharks have been fished throughout their range, but are of variable economic importance regionally. The species is highly regarded as a food fish in Japan, but not in the Western Atlantic. Increase in exploitation of sharks along the U.S. east coast over the last decade has resulted in decreased abundance.

Factors for Decline:

As described above, the shark is known to be caught for food in Japan. Although not a preferred target of commercial or recreational fisheries, they are still taken primarily with line fishing gear, but is also taken in bottom-set gillnets and on pelagic and bottom trawls. The shark has also been used for fishmeal, oil (from its liver) and its fins are used for the Oriental sharkfin trade. Sand tigers are very susceptible to fishery exploitation because they aggregate in large numbers during the mating season at particular coastal spots. These aggregations have been targeted in the past by fisheries. In addition, the juvenile sand tiger sharks are commonly found in estuaries of the eastern U.S. that are susceptible to runoff and pollution. Sibling cannibalism is another factor that makes this species vulnerable, since it limits the litter size to one or two pups. The low fecundity in combination of other life history characteristics makes this species extremely vulnerable to overfishing.

Status Reviews/Research Completed or Underway:

The sand tiger shark is managed by the Highly Migratory Species Fishery Management Plan (FMP) under the Magnuson-Stevens Fisheries Act. Under this FMP, the shark receives full protection from harvest on the Atlantic coast of the U.S. It is illegal to land (both commercially and recreationally) this species or any parts (fins, meat, jaws, etc). The December 24, 2003, Amendment 1 to the FMP for Atlantic tunas, swordfish and sharks also prohibits retention of sand tiger sharks. NMFS funded a status review under the Endangered Species Act (ESA) in FY 2003, and results should be available in FY 2004.

For further information on this Species of Concern, or on the Species of Concern Program in general, please contact Ms. Marta Nammack, NMFS, Office of Protected Resources, 1315 East West Highway, Silver Spring, MD 20910, (301)713-1401, Marta.Nammack@noaa.gov ; or Dr. Stephania Bolden, NMFS, Southeast Region, Protected Resources Division, 9721 Executive Center Drive N., St. Petersburg, FL 33702, (727)570-5312, Stephania.Bolden@noaa.gov.

References:

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