



Photo credit: Paula Whitfield, NOAA.

### KEY INFORMATION

#### Areas of Concern

Western Atlantic - south Atlantic, Gulf of Mexico, Caribbean.

**Year Identified as “Species of Concern”**  
1997

#### Factors for Decline

- Fishing
- Pollution
- Low fecundity
- Bycatch

#### Conservation Designations

IUCN: Vulnerable  
American Fisheries Society: Vulnerable

### Current Status:

#### **Demographic and Genetic Diversity Concerns:**

Sand tiger sharks have been fished throughout their range. The species is highly regarded as a food fish in Japan, but not in the Western Atlantic. Increased exploitation of sharks along the U.S. east coast in the 1980s and 1990s resulted in abundance declines of 90% from virgin conditions (Musick et al. 1993, Castro et al. 1999). Their aggregating behavior, slow growth, late maturity, and low productivity make them susceptible to exploitation.

#### **Existing Protections and Conservation Actions:**

The sand tiger shark is managed by the Highly Migratory Species Fishery Management Plan (FMP). Under this FMP, it has been illegal to land (both commercially and recreationally) this species or any parts (fins, meat, jaws, etc) on the Atlantic coast of the U.S. since 1997. Several states adopted similar regulations, though Maine, New Hampshire, Rhode Island, and Connecticut have not. The Southeast Science Center of NMFS completed a status update in February 2009 (Carlson and Castro 2009). The authors concluded that the sand tiger shark should be retained as a species of concern because of the species low productivity.



## Species of Concern

NOAA National Marine Fisheries Service

### Factors for Decline:

As described above, the shark is known to be caught for food in Japan. They are of variable economic importance regionally. Although not a preferred target of commercial or recreational fisheries, they are still taken primarily with line fishing gear, but also in bottom-set gillnets and in pelagic and bottom trawls. The sand tiger 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, juvenile sand tiger sharks are commonly found in **estuaries** of the eastern U.S. that are susceptible to runoff and pollution. In utero 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 with other life history characteristics makes this species extremely vulnerable to overfishing.

### Brief 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); a short, asymmetric caudal fin with a pronounced subterminal notch and short but strong ventral lobe); 5 medium gill slits in front of the pectoral fins; no gill rakers; a very short snout; and small eyes without nictitating membranes. They are light grey-brown above in color, and whiter below with yellow/yellowish blotches. The teeth are long and pointed, with a small spine-like cusp on either side. Maximum length is about 10.4 feet (318 cm). 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 (23 m). Their global distribution is all warm and temperate seas except the eastern Pacific. However, they may be found in shallow bays, around coral reefs and to depths of 600 feet (183 m) 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 6 feet (2 m) or 6 to 7 years; females mature at 7 feet (2.2 m) or 9 to 10 years (Goldman et al. 2006). The species is ovoviviparous (young develop as unattached embryos within the uterus, with energy supplied by large egg yolks). The reproductive cycle is at least 2 years. In North America, mating is thought to occur in alternate years between late March and April with an average litter size of 1 to 2 pups. Prey items include a wide variety of bony fishes, small sharks, rays, squid, crabs and lobsters.

**Links:** [Delaware Bay Shark tracker](#)

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