

SHARKS

Stock Status – Concern – Federal harvest restrictions have been in place since 1993, and a closure to commercial harvest in state waters occurred from 1997 to 2006. The 2002 large coastal shark stock assessment indicated that the two primary shark species in the North Carolina shark fishery (blacktip and sandbar) are not overfished and that the large coastal complex as a whole has improved. An assessment conducted in January 2006, however, indicates that the sandbar shark is overfished and that overfishing is occurring; while results from the blacktip shark models for the Atlantic population were insufficient to make a conclusion. Assessment of the overall large coastal complex did a poor job representing the status of the stock and the peer review said it should not be used for management of the complex. The small coastal sharks were recently assessed (May 2008) and sharpnose, finetooth, and bonnethead sharks were not overfished, but blacknose were overfished with overfishing occurring. Status of pelagic sharks (e.g., mako) is currently unknown, but they are assumed not to be overfished. NMFS will be conducting a stock assessment on sandbar, dusky and blacknose sharks in 2010.

Average Commercial Landings and Value – 2000-2009 – 990,001 lbs. / \$477,936

2009 Commercial Landings and Value – 412,799 lbs. / \$226,208 (quota managed)

Average Recreational Landings – 2000-2009 – LCS 5,179 lbs.; SCS 16,805 lbs.; Pelagic 15,371 lbs.

Average Number of Award Citations (150 lbs.^) – 2000-2009 – 17, 2009 – 54/48 released

Status of Fisheries Management Plan (FMP) – In North Carolina sharks are currently included in the Interjurisdictional FMP. A National Marine Fisheries Service (NMFS) Highly Migratory Species (HMS) plan has been in place since 1993. They are developing Amendment 3, which will seriously restrict the small coastal shark fishery. The Atlantic States Marine Fisheries Commission (ASMFC) has developed a coastal shark FMP that was implemented in 2009.

Research and Data Needs – Nursery ground delineation, commercial fisheries observation

Current Regulations – Refer to Proclamation FF-72-2009 for details. The possession of any shark species is limited to one shark per vessel per day, including charter and head boat vessels for hire. One additional Atlantic sharpnose (no minimum size) and one bonnethead (no minimum size) per person per day may be landed in addition to allowable bag limits for other sharks. The sale of a charter or head boat vessel possession limit is prohibited. The catch cannot be transferred from individual anglers to the captain or crew. If no vessel is involved, the possession limit is one shark per person per day. All sharks, except Atlantic sharpnose, smooth dogfish, bonnethead, finetooth and blacknose, retained under the possession limit must be a minimum size of 54 inches fork length (FL). Possession of the following sharks is prohibited: Atlantic angel, basking, bigeye sand tiger, bigeye sixgill, bigeye thresher, bignose, bluntnose sixgill, reef, Caribbean sharpnose, dusky, Galapagos, longfin mako, narrowtooth, night, sand tiger, sandbar, sharpnose sevengill, smalltail, whale, and white. All sharks not kept must be returned to the water in a manner to ensure the highest likelihood of survival.

Harvest Seasons – Refer to Proclamation FF-72-2009 for details. Open seasons in state waters are comparable to open seasons established by NMFS and are dependent upon quotas. It is unlawful to possess more than 33 large coastal sharks per trip. No (commercial) harvest or size restrictions are set on small coastal or pelagic sharks. A corresponding carcass must be landed with all fins, with the exception of smooth dogfish (see Proclamation FF-72-2009). Longlines in state waters can only be used to capture coastal sharks if they meet the following requirements: they shall not exceed 500 yards or have more than 50 hooks. Hooks attached to a longline shall not be corrosion resistant and must be designated by the manufacturer as circle hooks. A vessel shall be limited to a maximum of two (2) longlines. It is unlawful to use a large

mesh (stretched mesh size greater than, or equal to 5 inches) gill net more than 2,734 yards in length to capture sharks. Prohibited species are listed in Proclamation FF-72-2009.

Size and Age at Maturity - Variable, depending upon species

Historical and Current Maximum Age – Variable, depending upon species

Juvenile Abundance Index – Unknown, except for a few species in certain areas of the western Atlantic.

Habits and Habitats - The two most abundant sharks in North Carolina waters are the sandbar and Atlantic sharpnose. The sandbar shark is found in all warm temperate waters of the world. This is the most numerous of the large sharks of the mid-Atlantic bight. Sandbars are known to seasonally migrate along the eastern seaboard, moving north with the warming temperatures in the summer and southward again in the fall. They are most abundant in North Carolina during the spring and fall months. Males and females remain in sexually segregated schools outside the mating season, with males usually occurring in deeper water. As juveniles, sandbars feed heavily on blue crabs in addition to numerous small fishes. Later, as sub-adults and adults, they feed on larger fish, skates, and crustaceans.

The Atlantic sharpnose shark inhabits nearly the entire northeastern coast of North America. It is a year-round resident in the South Atlantic. In North Carolina, the Atlantic sharpnose shark is found year-round in continental shelf waters and near the beaches from May - October. It aggregates into large schools uniformly grouped by size and sex. Usually, four to seven pups are born in the estuaries during early June and are 9 to 14 inches in length. It feeds on shrimp, mollusks, and small fishes.

^Citation requirement changes effective 2008

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