Atlantic Striped Bass

(Morone saxatilis)

Less than forty years ago, the Atlantic Striped Bass or "striper" nearly disappeared from the Atlantic Coast. Today the fish is considered abundant. Some even



estimate that there may now be nearly 100 million Striped Bass in the Hudson River alone. Strict catch limits and bans on commercial fishing have transformed this nearly depleted fish into one of the most abundant and important recreational species in and around the New York/New Jersey Harbor Estuary. And, if current conservation measures continue, it should remain that way for every one of the area's recreational anglers.

No one can say for sure why fish populations rise and fall, but one obvious and important reason is overfishing. Greatly restricted fishing (there is no commercial fishing for Striped Bass in the Harbor Estuary) and strict recreational catch limits clearly had a positive impact on the striper. Changes in regulations were prompted partly by the health risk to people (PCB's that are found in the fat of these fish pose health risks to human consumers) and partly by the general decline in Striped Bass populations.

In New York, commercial fishing for Striped Bass was closed in the upper Hudson River in 1976, largely due to the high levels of PCBs that turned up in Striped Bass taken there. In 1991, New Jersey passed legislation that ended commercial fishing for Striped Bass throughout the state. Consumption advisories because of PCB contamination have helped as well. They suggest eating no more than one Striped Bass a month, and none for children and women of childbearing age. Finally, recreational fishers in New York and New Jersey are limited to taking, at most, two fish per day (one north of the George Washington Bridge), and those must be 28" in length or longer. Further aiding the Striped Bass, "catch and release" has grown in popularity amongst recreational fishers of this game fish, captured mostly through surfcasting.

Besides their recreational value to people, Striped Bass are important to the well-being of the Estuary's ecosystem. They are a major predator of planktonic invertebrates, larger aquatic invertebrates, and small fishes, keeping those populations in check. They are also important in the energy and nutrient transfer between the Harbor Estuary, its rivers, and the ocean.

The Atlantic Striped Bass, *Morone saxatilis*, is an anadromous species (lives in salt water but migrates to fresh water to breed) distributed along the Atlantic Coast from northern Florida to the St. Lawrence Estuary. Each striper in the Atlantic Coast population currently comes from one of three places; Chesapeake Bay, the Delaware River or the Hudson River. It is believed that many other rivers and tributaries that used to empty into the Atlantic Ocean, had, at one time, breeding stock of Striped Bass. Many of these water bodies have since been altered by man to not empty into the ocean, with, in many cases, the "new" land used for roadways and other coastal development.

Striped Bass spawn in riverine waters and the eggs drift to estuarine waters. Female Striped Bass mature at the age of six and males mature at the age of two. A female at age six can lay 500,000 eggs while a female at the age of 15 can produce 3 million eggs. Once the eggs are laid, the males fertilize them. The eggs hatch into larvae and then become juvenile fish. During this stage (egg to juvenile), their habitat is riverine to estuarine, respectively. Once Striped Bass become adults, they move out to the Atlantic Ocean, returning only to the riverine environment to spawn. Adult Striped Bass can be found in the Hudson River at the end of the March until the first week of June when they are spawning in the fresh water of the upper Hudson River. Due to a loss of natural habitat, the Estuary's piers and pilings have become important wintering habitat for Striped Bass. This has led to better management of the New York/New Jersey Harbor Estuary's shoreline development.





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