Why Do Sturgeon Jump in the Bagaduce River



Credit Robert Michelson/Photography by Michelson Taken under the authority of NMFS Permit #1516

One year ago, over July 4th weekend, a long time Penobscot resident and lobster harvester, out cruising on the Bagaduce with family and friends had a visual experience which he described to me as "I've never seen anything like this in my life!" In about 30 feet of water the surface exploded with a splash. A large fish with a long snout jumped out of the water two or three feet into the air. Could it be huge Striped Bass or another species?

Later he learned through research that it was a Shortnose Sturgeon. The first reported sighting in recent history in the Bagaduce River. Since last July, I learned from a friend that two other lobster fisherman told him that they too have seen Sturgeon rising in the river.

Maine Rivers of Yarmouth Maine confirmed via their website that the fish was a Shortnose Sturgeon. Maine Sea Grant in a historical compilation about the Bagaduce River (2017) refers to the French consuming Sturgeon in the 1630's. This was discovered through an archeological excavation at the site of Fort Pentagoet. The Penobscot Nation fished them in the Penobscot River some 3000 years ago. There is currently a large population in the Kennebec River which I have seen rolling and breaching while fishing there but never seen in the Bagaduce.

The Shortnose Sturgeon is a protected species under the law in Maine as well as under the Federal Endangered Species Act of 1973.

Depending on the reference there are as many as 29 types of Sturgeon found worldwide. On the Eastern Seaboard from Florida to Canada there are primarily 2 species; the Shortnose Sturgeon and the Atlantic Sturgeon.

In the spring the Shortnose Sturgeon adult moves far upstream into the fresher water of saltwater rivers to spawn and hatch. After spawning, the adult move rapidly back downriver to the saltier water to feed and rest. They are considered to be anadromous but unlike Salmon and Alewives they do not spawn in fresh water streams, rivers or ponds.

Sturgeon date back to the Middle Jurassic Period some 160 million years ago. It has rows of bony armor plates called "Scutes" running along its sides. The skeletal structure is cartilage, not bone. Bottom feeders, they use their protruding snout with four whisker like "Barbels" to sense prey and use their ventral tube like mouth to suck in small invertebrates, insects, crustaceans, worms and mollusks which are disturbed while they cruise for food.

They grow up 4'6" in length, weigh up to 60 pounds, and live up to 80 years. They are yellowish brown with a black head, black back and black sides. The belly is white to yellow.

The primary threats to the fish are dams that block access to spawning areas at lower parts of rivers, poor water quality, dredging, water withdrawals from rivers, unintended by-catch in some commercial fisheries and land based development.

Sturgeon are believed to regularly jump out of the water to equalize the pressure in their bladder to maintain buoyancy, clean their gills, avoid a predator or respond to boat noise. I believe it jumped to announce its return the Bagaduce River. Do we really know why Sturgeon jump?

Sources: Mr. Bill Hutchins, Maine Rivers.org, Maine Sea Grant, US F&W National Geographic, Britannica, NOAA, Florida Fish and Wildlife, Natural Resource Council of Maine.

Written by Tom Adamo, Vice President, Bagaduce Watershed Association, resident of Penobscot, Maine. The Earth does not need us. We need the Earth.