

## Va. sturgeon may be key to ancient fish's recovery

November 14 2010, By STEVE SZKOTAK , Associated Press

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In this Oct. 8, 2010 photo, Virginia Commonwealth University graduate student Matt Balazik, gets ready to toss a 70-lb Atlantic sturgeon into the James River near Charles City, Va. Balazik is a sturgeon census taker, using electronic tracking devices to monitor the movements of the armor-plated fish. (AP Photo/Steve Helber)

(AP) -- Researcher Matt Balazik wears his passion for saving the Atlantic sturgeon on his right arm - a tattoo of the ancient fish - and lives it by counting the bottom-feeding giants in the James River.

The 30-year-old doctoral student is part sturgeon wrangler, part census taker as he patrols the river in a small boat, checking 1,000-foot-long nets for what scientists believe is the last viable reproductive population of Atlantic sturgeon in the Chesapeake Bay. Sturgeon, which have survived virtually unchanged since the time of the dinosaurs, are

dwindling worldwide under the influence of human beings.

You hear these monster fish before you see them - Atlantic sturgeon leap out of the water and land with a loud splash, like a log dropped from above.

On a recent languid fall day on the river, in one of his last checks of the day in this shoestring recovery effort, Balazik has snared a sturgeon in his net and hauls it into the well of his boat.

Working with the skill of a Savile Row tailor, he records the big male's length, girth and gender, tags it, then lifts it onto a scale before posing with his trophy for a picture and tossing the 6-foot-long, armor-plated fish back into the river's silt-flecked waters.

"Their strength is just amazing," said Balazik, who has learned how to work with them rather than against them. "They just have great personalities."

Several species of sturgeon range from the Canadian Maritimes and the Great Lakes to Florida.

The once-bountiful Atlantic sturgeon that sustained North America's first European settlers and Native Americans now may number in the hundreds in the Chesapeake Bay, but no one really knows.

"If sturgeon are to be restored to the Chesapeake Bay, it will happen on the backs of the James River population," said Greg C. Garman, director for the Center for Environmental Studies at Virginia Commonwealth University and one of the leaders of this collaborative effort.

In October, the National Oceanographic and Atmospheric Administration announced the Chesapeake Bay sturgeon was among five

East Coast populations proposed for protection. The others range from New York to the South Atlantic states. The proposed listing is a desperate attempt to save "a fish of superlatives," Garman says.

The listing would be aimed at saving the fish's habitat, as their harvest already is banned.

"Sturgeon is the most endangered family of fish," said Brad Sewell, senior attorney with the Natural Resources Defense Council, which has pushed for protections. "Globally, they're all going extinct."

Sturgeon populations across the world have been threatened because of overfishing, pollution and dams that prevent the fish from reaching spawning grounds. Earlier this year, the Washington, D.C.-based Consortium for Ocean Leadership reported that 85 percent of sturgeon populations worldwide were at risk of becoming extinct.

In the U.S., sturgeon populations were depleted in the late 19th century as demand grew for their caviar. Now the greatest threats to the Atlantic sturgeon are pollution, climate change and cargo ships that navigate up the James and the Hudson River in New York State.

Garman has found sturgeon cleanly sliced in half by the propellers of those ships.

Before the bay's sturgeon can be restored, however, researchers have much to learn. The big fish spend most of their lives in north Atlantic waters, returning to their native waters in the James to spawn. Garman calls them "terrific explorers."

"Our fish are caught in the Hudson, the Delaware," he said. "They're moving all over the place."

Not too many years ago, researchers had pronounced the James River sturgeon population nearly extinct. Biologists couldn't find the fish. Then commercial fishermen set them straight.

In 1997, the U.S. Fish and Wildlife Service offered a bounty of \$100 for each live sturgeon captured. Biologists were soon rewarded with nearly 300 sturgeon retrieved from the James, York and Rappahannock rivers. The fish were tagged then returned to the water.

Sturgeon can range up to 15 feet, weigh hundreds of pounds and live a century. Skeletal remains found in a well at the Jamestown settlement and dating to 1609 revealed that the English who sailed into the [Chesapeake Bay](#) gorged on the fish.

"Historically, culturally, you could make the case we'd all be speaking Spanish if it wasn't for the Atlantic sturgeon and the effect they had on Jamestown," said Garman, who credits the fish with staving off starvation for early settlers.

With few research dollars available, Garman and others involved in the restoration have cobbled together a restoration effort that relies on graduate students, borrowed technology and the largesse of the business community.

The restoration is aimed at developing additional habitat to encourage reproduction; measures to preserve sturgeon; or rules to reduce the number of deadly ship collisions.

Balazik, a doctoral student, is just now beginning to be paid through a combination of grants. He grew up on the family's dairy farm on the James and heard tales of sturgeon but never saw one until he was kayaking on the James more than five years ago.

"When I started to see them jump that very first year, that was it," Balazik said.

Balazik has worked the waters for the past four years. He recorded two [sturgeon](#) the first year, and 34 this year. His biggest catch: an 8-foot, 300-pounder.

He has developed a deep affection for the [fish](#), and claims each has its own personality.

"It has gone through meteors, ice ages, megavolcanoes, but sadly it couldn't handle mankind," he said.

**More information:** VCU Rice Center: <http://www.vcu.edu/rice>

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Citation: Va. sturgeon may be key to ancient fish's recovery (2010, November 14) retrieved 11 May 2024 from <https://phys.org/news/2010-11-va-sturgeon-key-ancient-fish.html>

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