No Officer, It's Not a Bomb.

(Or, A Day in the Life of the Adult Atlantic Sturgeon Project in the Hudson River Estuary.)

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After a long day in the field this past July, I got a message from the Ocean City Maryland Bomb Squad. The gentleman said that they had recovered our satellite tag. Fearing he might destroy the tag and lose all the valuable data, I quickly called back and left a message explaining our project and what the tag was.

The next day I called Deputy Fire Marshal/Bomb Technician Cliff Christello and he explained what had happened. The prior day, someone swimming in the surf at Ocean City ran into an object in the water. The swimmer brought the object to the lifeguard on the shore. The lifeguard, unfamiliar with the object, immediately set up a perimeter around it and notified the bomb squad of possible military ordnance on the beach.

The Incident Action Report said the technicians "examined the object and found it to be a black cylinder with a round bulge at one end and what appeared to be a flexible rubber antenna attached to the bulge. It was apparent the object was in the ocean for some time due to the sea life that had attached itself to the outside of the object." Fortunately they were able to determine that the object was some sort of transmitter that did not pose a threat to the public.



Amanda Higgs, fisheries biologist, holding a male adult Atlantic sturgeon caught in the Hudson River Estuary in June of 2009.

After removing the debris attached to the object, the technicians located a phone number on the outside. They called the number and confirmed that the object belonged to the New York State Department of Environmental Conservation. By the time I talked

to them the next morning, they knew most of the particulars about the project from our website. The bomb squad graciously mailed the tag to Microwave Telemetry to extract all the data.

We deployed 20 MTI tags from May to July in 2007 and 2008 on adult Atlantic sturgeon. Four of these tags were deployed on adult females to learn more about where they go during their non-spawning years. Research has shown that adult female Atlantic sturgeon do not return to the Hudson River every



This male fish, measuring 1.9 m and weighing 47.2 kg, was tagged in June of 2008 with a MTI tag. The tag stayed attached to the fish until the programmed pop off date of 12/15/2008.

year to spawn. The recovered tag came from a female sturgeon, 2.38 m in length, weighing 99 kg and tagged on June 11, 2008 near the spawning grounds in the Hudson River. The tag popped off on schedule and began to transmit just like all the other tags, but seemed to be floating off the coast of Maryland.

Our project was a three year project that was extended into a fourth year because we still had tags to deploy. There were two portions of the project: to learn more about their habitat use and congregation areas in the Hudson River Estuary, and to learn more about their migration patterns and congregation areas along the Atlantic coast. We were interested in the particulars of the sturgeon's journey, i.e., where do they go, how close to shore, and at what depths. Satellite telemetry is bringing us closer to our goal.

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