Walleye Tagging 101



My name is Matt Faust, and I am a fisheries biologist with the Ohio Division of Wildlife at the Sandusky Fisheries Research Station.

Earlier this month, I received an email from Captain Peg VanVleet asking me to provide an update on the walleye tagging studies that have been ongoing in Lake Erie since 2011. I thought that rather than trying to cram too much information into one email that I could offer to write a series of articles in The Hook, which she took me up on.

Over the next several newsletters, I hope to provide readers with more information about how and why we tag walleye and other fishes in Lake Erie.

With my first article, I want to introduce everyone to the basics of walleye tagging.

How it Used to be Done

During the 1990s and early 2000s, biologists in Lake Erie used metal jaw tags to mark walleye each spring when fish were spawning.

These tags were cheap, which allowed thousands of walleye to be tagged annually, but they provided

biologists with limited information about each fish's movement.

We knew when and where a fish was released, but tagged individuals needed to be harvested and reported to understand anything about movement patterns or survival. This meant that sometimes fish went years between observations.

How it's Done Now

Today, fish in Lake Erie are tracked using a sophisticated acoustic telemetry system. Acoustic tags, which can function for up to 10 years, broadcast a unique signal once every few minutes. This signal is captured by an acoustic receiver (a small data-logging computer).

Acoustic receivers are deployed in the lake and collect records of tagged fish for up to a year at a time. When downloaded, these data give biologists a date and time record of each tagged fish that swam near a particular receiver.

Hundreds of receivers are anchored near the bottom of the Lake Erie and its connecting rivers. Receivers are provided by the Great Lakes Acoustic Telemetry Observation System (https://glatos.glos.us/), which was established by the Great Lakes Fishery Commission to

better understand fish movement and provide useful information to fisheries managers.

To track a fish's movements, the acoustic transmitters are surgically implanted. Walleye are captured in a variety of ways (e.g., electrofishing, gill nets, or even angling with LECBA captains) and once captured, fish are sedated using low-voltage electricity, and a small incision in the fish's belly is made to insert the transmitter, after which the incision is closed with 2-3 stitches. The whole process takes less than 5 minutes and after tagging; walleye are immediately released.

But Can you Catch One?

With so many walleye swimming around Lake Erie, it's tempting to think that anglers rarely catch a tagged fish, but about 25% of all tagged walleye will be caught each year. In fact, anglers who harvest a tagged walleye are eligible for a $100 reward if they report their catch.

If you harvest a tagged walleye, please keep the tag and call the Ohio Division of Wildlife's Sandusky Fisheries Research Station at 419-871-6039, or report it online at https://ohiodnr.gov/buy-and-apply/hunting-fishing-boating/fishing-resources/report-tagged-fish.

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Did You Catch a Tagged Fish in Lake Erie?

Why do we tag fish?

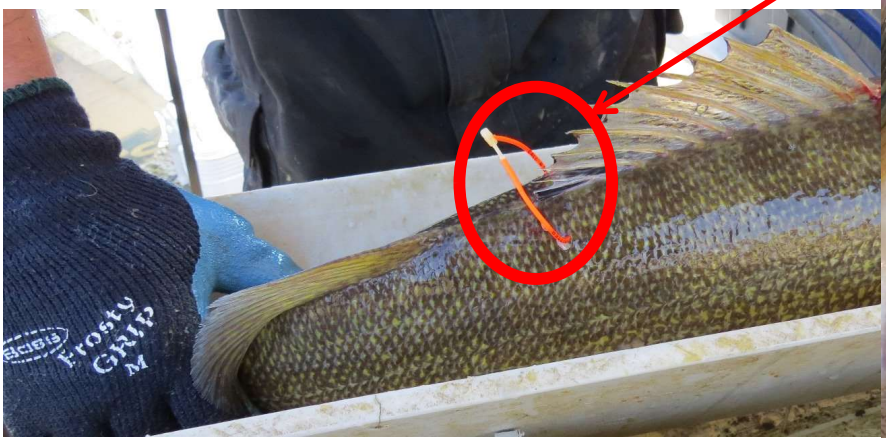
- To understand when and where fish move.
- To learn about habitat use, especially during spawning.



What do I look for?

Tagged fish in Lake Erie may have two tags:

- A bright, external orange tag either on the fish's back or belly (see below and right). These tags are sometimes lost after the fish is released.
- An internal, acoustic transmitter that can only be seen if the fish is cut open. These black tags are 1-2 inches long (see above) and are surgically implanted in the fish's belly (see stitches to right).
- Older tags may also be found, such as a metal jaw tags.





How should I report catching a tagged fish?

- Record the **tag number (5-digits on orange tag)**, species, and capture location.
- If you keep the fish, retrieve the internal acoustic transmitter – this will be found in the belly. There *may* be a reward for the return of this tag.
- Call the Ohio Division of Wildlife at **419-625-8062** or visit ohiodnr.gov/buy-and-apply/hunting-fishing-boating/fishing-resources/report-tagged-fish to report the tag.
- A biologist will provide information on where, when, and why the fish was tagged, and instructions for how to return the tag for the reward (if applicable).
- For more information on the acoustic telemetry studies occurring around the Great Lakes, see https://glatos.glos.us/