

Addressing Barotrauma in Lake Erie Yellow Perch

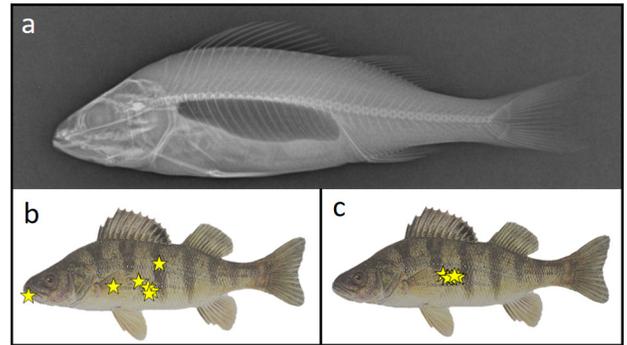
Lake Erie Yellow Perch support one of the largest freshwater commercial fisheries in the world. However, in the deep, eastern basin of Lake Erie, Yellow Perch often suffer tissue damage (e.g., stomach eversion, bulging eyes) when retrieved by anglers. This damage, known as barotrauma, is caused by the expanding swim bladder of the fish when retrieved from deep water. Up to 30% of these fish are released (considered too small to harvest), and, according to the New York State Department of Environmental Conservation, are unlikely to survive due to the damage caused by barotrauma.

Due to the negative impacts this phenomenon is having on valuable Yellow Perch fisheries in Lake Erie, resource managers, anglers, and stakeholders identified a need to discuss harvest and barotrauma treatment in the context of Lake Erie Yellow Perch.

New York Sea Grant (NYSG) initiated efforts to address this issue with an October 2, 2018 workshop featuring respected Lake Erie anglers and a panel of international experts on Yellow Perch barotrauma. The objectives were: (1) to exchange information and relevant experiences about barotrauma, and (2) to discuss utility and messaging in the context of barotrauma mitigation techniques.

Seven key participants (*see list at right*) received the most current Yellow Perch barotrauma information available. They unanimously agreed on the efficacy of four of seven ways to address barotrauma and improved their likelihood of appropriately treating fish with barotrauma using x-ray technology and information about Yellow Perch anatomy.

Post-workshop survey feedback from participants has informed the development of NYSG messaging to reduce barotrauma in Yellow Perch in 2019.



Panel a: Yellow Perch x-ray aids landmarking of swim bladder.

Panel b: prior to October workshop, location/s (stars) selected by participants where they felt a needle could be placed to relieve pressure placed on tissues by overfilled swim bladder.

Panel c: post-workshop, participants properly selected locations to relieve barotrauma pressure.

X-ray: NYSG/Jesse Lepak, Midstate Veterinary Services;
Yellow Perch: New York State Department of Environmental Conservation Biological Survey Series

Partners:

- Angling community members
- New York State Department of Environmental Conservation
- Lake Champlain Sea Grant
- Midstate Veterinary Services, Cortland, NY
- Regional Science Consortium, Erie, PA
- University of Florida: Gainesville
- University of Regina, Saskatchewan

The Sea Grant Focus Area for this project is Sustainable New York Fisheries

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