Great Lakes Fishery Commission Pulse on Science: Deliverables

This bi-annual newsletter lists titles and abstracts for recent research completion reports and links to associated media coverage and publications. Questions about any of the Commission-funded research below? Contact research@glfc.org.

Science Transfer Program:

**Accounting for Potential Effects on Fish Production from Barrier Removals to Inform Management Decisions: An Application of Structured Decision Making**
Jones, M., Steeves, T.B., Nowicki, S., Robinson, K., Peterson, L., and Jensen, A.
*April 2017*

**Using a simulated fish community to evaluate the relative importance of catchability on abundance estimates for acoustic surveys**
*July 2017*
Abstract: [http://www.glfc.org/pubs/pdfs/research/reports/2013_WAR_77004.htm](http://www.glfc.org/pubs/pdfs/research/reports/2013_WAR_77004.htm)

Fishery Research Program:

**Physical Processes**

**Development of annual indices of physical processes and relation to annual indices of fish recruitment in Lake Michigan**
Troy, C., Höök, T., and Bunnell, D.B.
*July 2017*
Abstract: [http://www.glfc.org/pubs/pdfs/research/reports/2012_TRO_44022.htm](http://www.glfc.org/pubs/pdfs/research/reports/2012_TRO_44022.htm)

Products:


**Native Fishes**

**Delineation of natural boundaries of muskellunge in the Great Lakes and the effects of supplementation on genetic integrity of remnant stocks**  
Sloss, B., Hanchin, P., Farrell, J., Kapuscinski, K., Miller, L., Scribner, K., and Wilson, C.  
*November 2017*  
Products:  


**Effects of dietary thiaminase on reproduction in three strains of atlantic salmon**  
Neff, B.  
*August 2017*  

**Behavioral and genetic diversity among ecotypes of Lake Superior brook trout**  
Hale, M., Nichols, K., McLaughlin, R., Wilson, C., and Mackereth, R.  
*June 2017*  

**Trophic ecology and isotopic niche of humper lake trout (Salvelinus namaycush) in Lake Superior: comparison with other morphotypes**  
*October 2017*  

**Comparative genetic and phenotypic analysis of lake trout morphs in representative North American lakes: Genetic aspects of phenotypic variation in Lake Superior lake trout morphs**  
Baillie, S., and Bentzen, P.  
*August 2017*  

**Mortality influences on maturation scheduling in lake whitefish and effects on Great Lakes fisheries management**  
Morbe, Y., Zhao, Y., and Dunlop, E.  
*April 2017*  
Products:  


**CLC**

**Evaluating short-term survival of walleye implanted with acoustic transmitters at elevated temperatures**
Faust, M., Vandergoot, C., and Kraus, R.
*May 2017*
Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2015_FAU_44049.htm

**Non-Theme**

**A gliding robotic fish-based mobile receiver platform for acoustic telemetry in fishery research**
*May 2017*

**Products:**

**Sea Lamprey Research Program:**

**Assessment**

**Sea lamprey quantitative environmental DNA surveillance**
*September 2017*
Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2015_REE_S4033.htm
Evaluating trade-offs for sea lamprey management using an operating model of the control program
Jones, M., Jensen, A., Dawson, H., and Infante, D.
November 2017
Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2015_JON_54029.htm

Proof of Concept: Use of DIDSON cameras to estimate adult sea lamprey abundance in streams
Johnson, N., Hrodey, P., McCann, E., Eickholt, J., and Pangle, K.
December 2017
Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2013_JOH_54046.htm

Barriers and Trapping
Effects of trap funnel and finger design on sea lamprey entrance and retention
Hrodey, P., Bravener, G., and Miehls, S.
August 2017

Proof-of-concept test of a differential pressure system to transport Great Lakes fishes
Miehls, S., Zielinski, D., Hrodey, P., Dearden, S., and Johnson, N.
December 2017
Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2017_MIE_44068.htm

Non-theme
Evaluating the risks and potential of genetic technologies for managing the impacts of sea lampreys in the Great Lakes
Jones, M., Thresher, R., and Drake, A.
December 2017

Other
A Preliminary Study on the Roles of Chemical Cues in American Eel Life History
Schmucker, A., Johnson, N., Galbraith, H., and Li, W.
September 2017

Products:

