



Great Lakes Fishery Commission Pulse on Science: Deliverables

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

Science Transfer Program:

Workshops on lake trout age assignment in annual stock assessment: accuracy and precision of methods specific to age ranges and length bins

He, J.

December 2017

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2014_HEJ_77005.htm

Fishery Research Program:

Re-establishment of Native Fishes

Development and testing of genomic markers for *Coregonus* species identification and population assessment

Stott, W.

January 2018

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2015_STO_44042.htm

Human Dimensions

Angler demographics: an age-period-cohort analysis

Winkler, R.

April 2018

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2015_WIN_44044.html

Products (including state-level angler data, reports, and maps):

- <https://www.mtu.edu/greatlakes/fishery/>

Council of Lake Committees Priorities

Verification of natural mortality estimation of walleye in Lake Erie based on integrated Bayesian statistical catch-at-age models

Jiao, Y.

June 2018

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2016_JIA_44055.html

Non-theme

Evaluating experimentally induced thiamine deficiency in Atlantic salmon using in situ hybridization

Kraft, C.

April 2018

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2017_KRA_44070.html

Sea Lamprey Research Program:

Barriers and Trapping

A proof-of-concept test of selective removal of sea lamprey via behavioral guidance in a model fishway

Wagner, M.

March 2018

Abstract: http://www.glfrc.org/pubs/pdfs/research/reports/2016_WAG_54049.htm

Products:

- Article in MSU's AgBioResearch Futures Magazine: <http://www.canr.msu.edu/news/aquatic-invaders-defending-the-great-lakes-from-invasive-species>
- MSU Road Trip Video: <https://www.youtube.com/watch?v=BEEcERftROQ&feature=youtu.be>
- WUPMFM –NPR Radio Interview: <http://michiganradio.org/post/trying-trap-invasive-sea-lamprey-eel-ladders>

Evaluating colored LED strobe lights for use in the behavioral guidance of sea lamprey

Elvidge, C.

April 2018

Abstract: http://www.glfrc.org/pubs/pdfs/research/reports/2017_ELW_76008.htm

Chemosensory Communications

The neural link between novel olfactory signals and locomotion

March 2018

Abstract: http://www.glfrc.org/pubs/pdfs/research/reports/2015_ZIE_54035.htm

Products:

- Buchinger, T.J., Siefkes, M.J., Zielinski, B.S., Brant, C.O., and Li, W. 2015. Chemical cues and pheromones in the sea lamprey (*Petromyzon marinus*). *Front Zool.* 12:32. <https://frontiersinzoology.biomedcentral.com/articles/10.1186/s12983-015-0126-9>
- Daghfous, G., Green, W.W., Alford, S.T., Zielinski, B.S., Dubuc, R. 2016. Sensory Activation of command cells for locomotion and modulatory mechanisms: lessons from lampreys. *Front Neural Circuits.* 10:18. <https://www.frontiersin.org/articles/10.3389/fncir.2016.00018/full>

Non-theme

An investigation of a potential morphotype trigger in two *Ichthyomyzon* species

Neave, F.

March 2018

Abstract: http://www.glfrc.org/pubs/pdfs/research/reports/2007_NEA_54001.htm