

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.

Fishery Research Program:

Re-establishment of Native Deep-water Fishes

Reproduction in lake trout morphotypes surrounding Isle Royale Goetz, F.

February 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2013_GOE_44026.htm

Products:

• Goetz, F., Sitar, S., Jasonowicz, A., and Seider, M. 2017. Reproduction of Lake Trout morphotypes at Isle Royale in northern Lake Superior. Trans. Am. Fish. Soc. 146:268-282. http://dx.doi.org/10.1080/00028487.2016.1259660

Can contemporary cisco stocks support historical levels of yield in Lake Superior? Rook, B.

June 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2016 HAN 44057.htm

Sea Lamprey Research Program:

Barriers and Trapping

Selective passage of Sea Lamprey and native Great Lakes fish through hydraulic barriers

Castro-Santos, T.

February 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2017 CAS 54063.htm

Effects of environmental and biological factors on migratory sea lamprey catchability and abundance estimation

Lewandowski. S.

February 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2017 LEW 76009.htm

Physiological and behavioural responses of sea lamprey to low frequency sound Higgs, D.

May 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2017_HIG_54060.htm

Lampricides

Effects of Water Alkalinity, pH, and Dosing Regimen on Lake Sturgeon Sensitivity to the Lampricide, 3-trifluoromethyl-4-nitrophenol (TFM) Wilkie, M.

April 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2016_WIL_54050.htm

Comparison of Continuous and Interrupted Lampricide Block Toxicity to Sea Lamprey and Lake Sturgeon

Lantz, S.
July 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2015 LAN 54057.htm

Chemosensory Communications

Chemistry to facilitate studies of pheromones; TFM and novel biosensors Li, W.

March 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2016 LIW 54059.htm

Optimize 3kPZS application rate to yield large and consistent catches of sea lamprey in barrier-integrated traps

Johnson, N. March 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2017 JOH 54065.htm

Technical Assistance to Development of Additional Pheromone-Based Control Agents Li, W.

May 2019

Abstract: http://www.glfc.org/pubs/pdfs/research/reports/2012_LIW_54013.htm

Products:

- Li, Ke, et al. "High-performance liquid chromatography quantification of enantiomers of a Dihydroxylated tetrahydrofuran natural product." *Chirality* 30.8 (2018): 1012-1018.
- Li, Ke, Tyler J. Buchinger, and Weiming Li. "Discovery and characterization of natural products that act as pheromones in fish." *Natural product reports* 35.6 (2018): 501-513.