Reed M. Brodnik

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EDUCATION

M.S. Evolution and Ecology. The Ohio State University, Department of Evolution, Ecology, and Organismal Biology, Columbus, OH 2012-current GPA: 3.428 Advisor: Dr. Stuart Ludsin
Thesis entitled: Regulation of phenotypic expression and performance by human-induced rapid environmental change: the roles of energetic constraints and epigenetic variation

B.S. Evolution and Ecology. The Ohio State University, Department of Evolution, Ecology, and Organismal Biology, Columbus, OH 2008-2012 GPA: 3.811
Cum Laude; Departmental Honors and Departmental Research Distinction
Thesis entitled: Stock structure in western Lake Erie's yellow perch fishery: quantifying contributions from the Lake St. Clair – Detroit River corridor. Advisor: Dr. Stuart Ludsin

APPOINTMENTS

2013-Current Teaching Assistant/Research Assistant, Department of Evolution, Ecology and Organismal Biology, The Ohio State University

2012 Teaching Assistant, Center for Life Sciences Education, Department of Biology, The Ohio State University

RESEARCH EXPERIENCE

2012 Research Technician for J. Smith, Aquatic Ecology Laboratory, The Ohio State University. Assisted with field work and received training in boat operation, electrofishing methods, and ecological data collection.

2011-2012 Research Assistant, Aquatic Ecology Laboratory, Department of Evolution, Ecology and Organismal Biology. Completed undergraduate thesis project.

2011 F.T. Stone Laboratory, The Ohio State University. Worked independently on a Research Experience for Undergraduates (REU) project identifying and cataloguing fish specimens for their addition to the OSU Museum of Biological Diversity Fish Collection Database. Advisor: Marc Kibbey

2009 Department of Entomology – Insectary, The Ohio State University Department of Entomology. Assisted professionals in the field of entomology with the rearing of insects and other arthropods for university-wide research projects.

PUBLICATIONS

Brodnik, R., M.E. Fraker, K.M. DeVanna, L. Carreon-Martinez, B.J. Fryer, D.D. Heath, K. Pangle, J.M. Reichert, E. Roseman, S.A. Ludsin. Stock structure in western Lake Erie's yellow perch fishery: quantifying contributions from the Lake St. Clair–Detroit River corridor, in review at Molecular Ecology

Fraker, M.E., E.J. Anderson, **R.M. Brodnik**, L. Carreon-Martinez, K.M. DeVanna, B.J. Fryer, D. D. Heath, J.M. Reichert, and S.A. Ludsin. Particle backtracking improves breeding subpopulation discrimination and source identification in mixed populations, in review at Methods in Ecology and Evolution

SCHOLARSHIPS

R.M. Brodnik - ($4500) The Ohio State University Arts and Sciences Undergraduate Research Scholarship, Stock structure in western Lake Erie's yellow perch fishery: quantifying contributions from the Lake St. Clair – Detroit River corridor (2011-2012)

R.M. Brodnik - ($500) Sigma Xi Society - The Ohio State University Chapter GIAR, Stock structure in western Lake Erie's yellow perch fishery: quantifying contributions from the Lake St. Clair – Detroit River corridor (2011-2012)

PRESENTATIONS

Ludsin, S.A., E.J. Anderson, **R. M. Brodnik**, K.M. DeVanna, L. Carreon-Martinez, B.J. Fryer, D.D. Heath, J.M. Reichert, and M.E. Fraker. Particle backtracking as a tool to improve stock discrimination capabilities in mixed populations: An example with Lake Erie yellow perch. Oral Presentation. Ecological Society of America, Minneapolis, MN, August 2013

Ludsin, S.A., E.J. Anderson, **R. M. Brodnik**, K.M. DeVanna, L. Carreon-Martinez, B.J. Fryer, D.D. Heath, J.M. Reichert, and M.E. Fraker. Particle backtracking as a tool to improve stock discrimination capabilities in mixed populations: An example with Lake Erie yellow perch. Oral Presentation. International Association for Great Lakes Research, West Lafayette, IN, June 2013.

Brodnik, R. M., L. Carreon-Martinez, D. Heath, K.M. DeVanna, E. Anderson, E. Roseman, K. Pangle, J. Reichert, B. Fryer, and S.A. Ludsin. Stock structure in western Lake Erie's yellow perch fishery: Contributions from the Lake St. Clair-Detroit River corridor**.** Oral Presentation. American Fisheries Society Annual Meeting, St. Paul, MN, August 2012.

Brodnik, R. M., L. Carreon-Martinez, D. Heath, K.M. DeVanna, E. Anderson, E. Roseman, K. Pangle, J. Reichert, B. Fryer, and S.A. Ludsin. Stock structure in western Lake Erie's yellow perch fishery: Contributions from the Lake St. Clair-Detroit River corridor. Poster Presentation, The Ohio State University Denman Undergraduate Research Symposium, March 2012.

OTHER TRAINING AND CERTIFICATION

Completed "Larval Fish Identification Workshop" and The Ohio State University – F.T. Stone Laboratory. (2008)

TEACHING EXPERIENCE

Integrated Biology; teaching assistant for Drs. Harold Fisk and Norm Johnson at The Ohio State University (2012)
Biology and Ecology of Fishes; teaching assistant for Dr. Stuart Ludsin at The Ohio State University (2013)

MENTORING EXPERIENCE

Undergraduate Research Supervision
Matthew Hodanbosi 2012-2014 (The Ohio State University – Honors Thesis) Impacts of dissolved oxygen concentration and water temperature on the standard metabolic rate of the African cichlid *Julidochromis ornatus*
Allison McLaughlin 2012-2014 (The Ohio State University – Honors Thesis) Impacts of water temperature and dissolved oxygen concentration on individual behavioral differences in the African cichlid *Julidochromis ornatus*

PROFESSIONAL SOCIETY MEMBERSHIP

American Fisheries Society