

Shawn P. Devlin

University of Montana
Flathead Lake Biological Station
32125 Bio Station Lane
Polson MT 59860 USA

Mobile: 406 270 0783
Office: 406 982 3301 x230
shawn.devlin@umontana.edu
shawn.devlin@gmail.com
shawnpdevlin.weebly.com

Education

WRIGHT STATE UNIVERSITY, Dayton, OH

Environmental Science, Ph.D., March 2011

Thesis Title: "Littoral zone structure, energy mobilization and benthic food webs in oligotrophic northern temperate lakes"

Advisor: Dr. Yvonne Vadeboncoeur, Ph.D.

UNITY COLLEGE, Unity, ME

Environmental Biology, B.Sc., 2003

Professional Experience

UNIVERSITY OF MONTANA, Polson, MT

Flathead Lake Biological Station

Postdoctoral Scientist

May 2014-

UNIVERSITY OF JYVÄSKYLÄ, Jyväskylä, Finland

Department of Biological and Environmental Science

Postdoctoral Researcher

2011-2014

WRIGHT STATE UNIVERSITY, Dayton, OH

Environmental Science - Biological Sciences

Graduate Teaching Assistantship

2007-11

Graduate Research Fellowship

2005-06

WOOD'S END RESEARCH LABORATORY, Mount Vernon, ME

Research Technician/Research Project Manager

2003-05

NATIONAL AUDUBON SOCIETY- CORNELL UNIVERSITY

SEABIRD RESTORATION PROGRAM, Bremen, ME/ Ithaca, NY

Stratton Island Co-Supervisor/Warden

Summer 2003

Seal Island NWR Resident Intern/Warden

Summer 2002

Roving Research Intern

Summer 2001

UNITY COLLEGE, Unity, ME

Waterfowl Monitoring Research Technician

2001-2003

Chemistry Laboratory Assistant

1999-2002

Publications

- Devlin, S.P., M.J. Vander Zanden, Y. Vadeboncoeur (2013) Depth-specific variation in carbon isotopes demonstrates resource partitioning among the littoral zoobenthos. *Freshwater Biology* 58: 2389–2400, doi: 10.1111/fwb.12218.
- Mariash, H.L., S.P. Devlin, L. Forsström, R.I. Jones, M.L. Rautio. (2014) Benthic mats subsidize pelagic consumers in arctic and subarctic pond food webs. *Limnology and Oceanography*. 59(3), 733-744. doi: 10.4319/lo.2014.59.3.0733
- Vadeboncoeur, Y, S.P. Devlin, P.B McIntyre, M.J. Vander Zanden. (2014) Is there light after depth? Distribution of periphyton chlorophyll and productivity in lake littoral zones. *Freshwater Science*. 33(2), 524-536, doi: 10.1086/676315.
- Higgins, S.N., B. Althouse, S.P. Devlin, Y. Vadeboncoeur, M.J. Vander Zanden. (2014) Large-bodied grazers alter the autotrophic structure and total ecosystem productivity of lakes. *Ecology* 95, 2257–2267, doi: 10.1890/13-2333.
- Dorado-Garcia, I., J. Syväranta, S.P. Devlin, J.M. Medina-Sánchez, R.I. Jones. Experimental assessment of a possible microbial priming effect in a humic boreal lake. Accepted at *Aquatic Sciences*.
- Devlin, S.P., Y. Vadeboncoeur, M.J. Vander Zanden. Sensitivity of whole-lake benthic primary production estimates to spatio-temporal variation in periphyton productivity. Accepted *Limnology and Oceanography-Methods*
- Devlin, S.P., J. Saarenheimo, J. Syväranta, R.I. Jones. Top consumer abundance influences lake methane efflux. Revision submitted to *Nature Communications*.
- Saarenheimo J. , S.L. Aalto, J. Syväranta, S.P. Devlin, M. Tiirola R.I. Jones. Bacterial community response to a tri-trophic cascade during a whole-lake fish manipulation. Revision submitted to *Ecology*.
- Vesterinen, J. S.P. Devlin, J. Syväranta, R. I. Jones. Littoral primary production balances whole-lake metabolism in a highly humic lake. Submitted to *Freshwater Biology*.
- Tappenbeck, S.K., S.P. Devlin, T.H. Tappenbeck, B.K. Ellis, J.A. Stanford, D.W. Chess, and D.C. Whited. Long-term trends in abundance, distribution, and population dynamics of the invasive opossum shrimp (*Mysis diluviana*) in a large oligotrophic lake. In preparation for submission to *PNAS*.
- Devlin, S.P., B. Ellis and J.A. Stanford. Heating up Flathead Lake: modeling thermal structure under a changing climate. In preparation for submission to the *Journal of Great Lakes Research*.

Presentations

- Devlin, S.P., B.K. Ellis and J.A. Stanford. Heating up Flathead Lake: modeling thermal properties under a changing climate. May 2015. *Society of Freshwater Sciences*. Milwaukee, Wisconsin.
- Vesterinen, J. P., S.P. Devlin, J. Syväranta and R.I. Jones. Dominance of littoral primary production in a highly humic boreal lake. February 2015. *Association for the Sciences of Limnology and Oceanography*. Granada, Spain.

- Saarenheimo, J., S.P. Devlin, J. Syväranta, M. Tiirola and R.I. Jones. Cascading trophic regulation of methane emissions in a boreal lake. February 2015. *Association for the Sciences of Limnology and Oceanography*. Granada, Spain.
- Karhunen, J., J. Syväranta, S.P. Devlin, R.I. Jones, A. Rissanen, M. Tiirola. Connections of greenhouse gas emissions and microbial genes in boreal lakes. September 2013. *Society of Aquatic Microbial Ecologists*. Stresa, Italy
- Devlin, S.P., J. Vesterinen, T. Peltomaki, J. Syväranta, R.I. Jones. Littoral primary production in DOC-rich boreal lakes. August 2013. *Society of International Limnology*. Budapest, Hungary
- Vadeboncoeur, Y., S.P. Devlin, K.J. Butkas, M.J. Vander Zanden. Strong energetic coupling of littoral zoobenthic production to periphyton in north temperate lakes. May 2012. *Society for Freshwater Science*. Jacksonville, Florida
- Vadeboncoeur, Y., S.P. Devlin, P.B. McIntyre, M.J. Vander Zanden. April 2012. Is there light after depth? Spatial variation in periphyton chlorophyll and productivity in oligotrophic lakes. *Society for Freshwater Science*. Louisville, Kentucky
- Devlin, S.P. November 2011. Littoral sediment bacterial production and abundance in temperate oligotrophic lakes. *WET/ECO Seminar Series*. University of Jyväskylä, Jyväskylä, Finland
- Devlin, S.P. March 2011. Littoral sediment bacterial production and abundance in temperate oligotrophic lakes. *Env. Science Dissertation Defense Series*. Wright State University, Dayton, Ohio
- Devlin, S.P., Y. Vadeboncoeur, M.J. Vander Zanden. June 2010. Littoral sediment bacterial production and abundance in temperate oligotrophic lakes. *Association for the Sciences of Limnology and Oceanography*. Santa Fe, New Mexico
- Devlin, S.P., Y. Vadeboncoeur, M.J. Vander Zanden. April 2010. Littoral sediment bacterial production and abundance in temperate oligotrophic lakes. *Celebration of Research, Scholarship and Creative Activities*. Wright State University, Dayton, Ohio
- Devlin, S.P., Y. Vadeboncoeur, K.J. Butkas, M.J. Vander Zanden. August 2008. Stable isotope variation in littoral zoobenthic communities: Resource partitioning in a heterogeneous resource environment. *Ecological Society of America*. Milwaukee, Wisconsin
- Devlin, S.P., Y. Vadeboncoeur, K.J. Butkas, M.J. Vander Zanden. July 2007. Stable isotope variation in littoral zoobenthic communities: Resource partitioning in a heterogeneous resource environment. *Summer Seminar Series*: University of Wisconsin Trout Lake Station, Boulder Junction, Wisconsin
- Vadeboncoeur, Y., S.P. Devlin, P.B. McIntyre, M.J. Vander Zanden. August 2007. Paradigms of the plankton and the spatio-temporal variation in periphyton biomass and productivity in oligotrophic lakes. *International Society for Limnology*. Montreal, Quebec
- Butkas, K.J., M.J. Vander Zanden, Y. Vadeboncoeur, S.P. Devlin. August 2007. A comparison of benthic secondary producer communities and production rates among lake types. *Ecological Society of America*. San Jose, California
- Devlin, S.P., Y. Vadeboncoeur, M.J. Vander Zanden, K.J. Butkas. July 2007. Spatio-temporal variation in periphyton productivity, biomass, respiration and $\delta^{13}\text{C}$ across a lake-size gradient. *Summer Seminar Series*: University of Wisconsin Trout Lake Station, Boulder Junction, Wisconsin
- Devlin, S.P., Y. Vadeboncoeur, K.J. Butkas M.J. Vander Zanden. February 2007. Spatio-temporal variation in periphyton productivity, biomass, respiration and $\delta^{13}\text{C}$ across a lake-size gradient. *Association for the Sciences of Limnology and Oceanography*. Santa Fe, New Mexico

Vadeboncoeur, Y., S.P. Devlin, M.J. Vander Zanden, K.J. Butkas. June 2006. Spatio-temporal variation in benthic algal biomass, C:N:P, and primary productivity in north temperate lakes. *Association for the Sciences of Limnology and Oceanography*. Victoria, British Columbia
 Co-chaired special session - S55- "From the Center to the Edge: Rediscovering the Littoral Zone in Lake Ecosystems." June 2010. *Association for the Sciences of Limnology and Oceanography*. Santa Fe, New Mexico

Posters

Medina-Sánchez, J. M., I. Dorado-García, J. Syväranta, S.P. Devlin, R.I. Jones. Evaluation of microbial priming effect in a humic lake. July 2014. Congress of the Iberian Association of Limnology. Santander, Spain.

Dorado-Garcia, I., J. Syväranta, S.P. Devlin, J.M. Medina-Sánchez, R.I. Jones. Testing microbial priming: contrasting effects of labile DOC addition on plankton depending on presence of fish in a humic boreal lake. September 2013. *Society of Aquatic Microbial Ecologists*. Stresa, Italy

McCormick, J.M., S.P. Devlin, Y. Vadeboncoeur. February 2007. Effects of groundwater flow and substrate on periphyton biomass and productivity in an oligotrophic seepage lake. REU poster session. *Association for the Sciences of Limnology and Oceanography*. Santa Fe, New Mexico

Devlin, S.P., Y. Vadeboncoeur. September 2005. Spatio-temporal variation in benthic algal biomass and productivity in northern temperate lakes. *Biological Sciences Research Symposium*. Wright State University.

Academic Mentoring

University of Jyväskylä- Supervised Graduate Students

- Jussi Vesterinen 2013
Consumer body size influences food web processes in DOC-rich boreal lakes. PhD thesis in progress
- Naren Koju 2013
Odonate resource use in a complex littoral environment. MSc thesis in progress
- Satish Basnet 2012
Measuring anaerobic production in humic lakes. MSc thesis in progress.
- Jussi Vesterinen 2012
Littoral primary production in a highly humic boreal lake. MSc thesis completed.
- Juan Carlos Zuniga 2011
Responses of littoral macroinvertebrates in a small humic lake to different fish predation regimes. MSc thesis completed.

NSF Research Experience for Undergraduates (REU) Mentees

- Karen Pedersen, Wright State University 2008
Employing a Diving-PAM to measure light response curves of periphyton in northern oligotrophic lakes. Currently Master's student at WSU

- Ben Clifford, St. Olaf College 2007
Benthic primary production responses to bioturbation caused by an invasive crayfish. Currently PhD student at Notre Dame
- Jim McCormick, Wright State University 2006
The influence of groundwater discharge and recharge on benthic primary production in Sparkling Lake, WI.

Supervised 10 undergraduate and 3 graduate laboratory research assistants
 Supervised 12 undergraduate and 2 graduate field research assistants
 Mentored 3 undergraduate independent projects
 Participated in Delta Mentor Training Seminar, Leader: Dr Ashley Shade 2008

Teaching

Laboratory Course Taught
 BIO 105-Biology of Food 2007 & 2009
 BIO 107-Biology of Disease 2010
 BIO 346-Concepts in Biology II 2009
 BIO 411-Aquatic Communities 2008
Lectures- Shared/Guest Lecturer
 WETs 101 Introduction to Aquatic Research 2011 – 2013
 BIOa 903 Introduction to Env Science 2012
 BIO 406 Aquatic Environment 2007
 BIO 411 Aquatic Communities 2008

Grants/Awards

Montana Dept. of Env. Quality – Water Quality Liaison \$6000.00 2015
 Wright State University - Biology Award for Research Excellence 2008
 Wright State University - Graduate Travel Award 2006 & 2008
 Assoc. for the Sciences of Limnology and Oceanography Travel Award 2006
 Sigma Xi Undergraduate Grant-in-Aid of Research 2003

Further experience in grant writing via applications to the Academy of Finland for research support for postdoctoral research (2014 - €429,000 Grade 4:Very Good and 2013 - €407,000 Grade 3:Good). Details regarding applications available upon request.

Certifications and Society Memberships

Animal Care Certified
 Radiation Safety Certified
 PADA Open Water SCUBA Certified with over 500 research dives logged
 US Coast Guard Boater Safety Certified
 Past or present member of Ecological Society of America, Association for the Sciences of Limnology and Oceanography, Society of Freshwater Science, International Society of Limnologists and NordSIL.

Community Outreach, Volunteer Efforts, and Service

Reviewer for Aquatic Science, Limnology, Canadian Journal of Fisheries, Ecological Monographs, PeerJ, Oecologia, Journal of Arctic Science, Journal of Marine Science and proposal reviewer for NSF-DEB Ecosystems

Ferndale Volunteer Fire Department, Firefighter	2014-
JYU WET & ECO Manuscript language editor	2011-2013
JYU Foreign staff steering committee	2012
WSU Env. Sci. Journal Club, organizer and chair	2006-2011
WSU BIO Molecular biology search committee- Grad student rep.	2010
WSU Volunteer research assistant – Forest Lepidoptera study	2006-2010
Beaver Creek Wetlands/Dayton Audubon Birdathon	2005-2010
WSU EES Biogeochemistry search committee- Grad student rep.	2009
WSU BIO Community ecology search committee- Grad student rep	2008
Non-point source pollution/shore erosion control, Belgrade Lakes Regional Conservation Association	2004 & 2005
North Penobscot Bay Christmas Bird Count	2001-2004
Unity Area Christmas Bird Count	2001-2003
Unity College May Challenge Birdathon	2001-2003
National Audubon Society-Project Puffin Birdathon	2001-2003
Led birding walks, Unity College Earth Day Celebration	2000-2003