

Erik A. McDonald

EDUCATION

Masters of Science in Biological Sciences (May 2008)

Central Michigan University, Mount Pleasant, MI

- Thesis Title: “*Using Growth, Diet, and the Distribution of Larval Fishes as Tools for Assessing Habitat Function and Quality within the Detroit River.*”
- Description: Species composition and succession of larval fishes were compared between nursery and main channel areas to gain an understanding of species-specific habitat requirements and nursery habitat function in the Detroit River. Diet and growth data were also used to make inferences about habitat quality.
- Advisor: Dr. A. Scott McNaught
- Committee Members: Dr. Tracy Galarowicz and Dr. Edward Roseman (USGS)
- GPA: 3.97

Bachelor of Science in Biological Sciences (June 2006)

Central Washington University, Ellensburg, WA

- Specialization: Ecology
- Advisor: Dr. Tom Cottrell
- Cumulative GPA: 3.71, Magna Cum Laude

TEACHING EXPERIENCE

University of Washington – Tacoma

Full-time lecturer (AY 2012-13, 2013-2014); Part-time lecturer (AY 2011-12)

- TESC 110 (General Biology), lecture and lab
- TESC 120 (Ecology, evolution, genetics, and biodiversity), lecture and lab
- TESC 140 (Plant and animal anatomy and physiology), lecture and lab
- TESC 434 (Biology, History, and Politics of Salmon in the Pacific Northwest), lecture only
- TCORE 100 level (Where the water meets the road: examining the environmental impacts of urbanization on aquatic ecosystems), lecture only
 - I created this class for UW Tacoma’s Core program. The class introduces freshmen to science by addressing how urban centers impact their neighboring water bodies. The lectures focus on Puget Sound, while the global context is examined with student presentations on large cities outside the United States.

Green River Community College

Part-time Instructor (Spring 2010-Spring 2012)

- Bio 100 (A Survey of Biology), Hybrid
- AP 100 (Human Anatomy and Physiology), lecture only
- ENSC 204 (Environmental Science), lecture only

Tacoma Community College

Part-time Instructor (Summer 2008-Summer 2011)

- Bio 100 (A Survey of Biology), lecture and lab
- Bio 140 (Marine Biology), lecture and lab
- Bio 160 (Fundamentals of Cell Biology), lecture and lab
- ABE levels 2-6 (Adult Basic Education - Math)

Highline Community College

Part-time Instructor (Winter 2010 – Spring 2011)

- Bio 100 (A Survey of Biology), Face to face and Hybrid classes
- Bio 160 (Introduction to Cell Biology), lecture and lab
- Bio 175 (Human Biology), lecture and lab

Fife School District (Winter 2008-2010)
Emergency Substitute Teacher

Central Michigan University (2006-2008)
Teaching Assistant: Ecology (Bio 340)

- Prepared lesson plans, taught ecology labs, and graded lecture exams
- Guest lecturer in Ecology (Bio 340)

**PROFESSIONAL
EXPERIENCE**

Tacoma Community College (April 2009-September 2010)
Aquarium Technician

- I maintained a 600 gallon saltwater aquarium and a 400 gallon freshwater aquarium. Live specimens were also collected when needed.

U.S. Geological Survey Great Lakes Science Center, Ann Arbor, MI (April - August 2007)
Student Contractor

- Collected, enumerated, and identified larval fish and zooplankton samples from the Great Lakes using paired bongo nets, plankton nets, and light traps
- Quantified and identified larval fish stomach contents
- Assisted with food web sampling in Lake Huron and Lake Michigan
 - Deployed bottom and mid-water trawl, PONAR dredge (sediment samples), and collected larval fish and zooplankton

Cascade Aquatics LLC, Ellensburg, WA (July - September 2005)
Field Technician

- Collected diet samples from juvenile Chinook salmon, estimated population abundance, microhabitat use, measured stream velocity, and aquatic insect sampling
- Data collected in Yakima, Teanaway, and Cle Elum Rivers
- Assessed salmon spawning activity in the Yakima River

Battelle (Department of Energy), Richland, WA (June - July 2005)
Field Technician

- Caught juvenile Chinook salmon using beach and purse seines in the Columbia River as part of a PIT (Passive Integrated Transponder) tag study

**PROFESSIONAL
DEVELOPMENT**

Participant in Universal Design for Learning (UDL) Project at Tacoma Community College (Fall 2009 - Spring 2010)

- Implemented clickers in biology 100
- Goals: improve student engagement, retention, and student learning

Adjunct Faculty Voting Member for the Instructional Council at Tacoma Community College (October 2009 – Spring 2010)

Adjunct Faculty Institute at Tacoma Community College (January - March 2009)

- An interdisciplinary, collaborative format aimed at enhancing knowledge in college teaching and learning

PUBLICATIONS

McDonald EA, McNaught AS, Roseman EF. In Press. Use of main channel and two backwater habitats by larval fishes in the Detroit River. *Journal of Great Lakes Research.*

**PROFESSIONAL
PRESENTATIONS**

Tacoma Community College Seminar (October 2013)

- Oral Presentation Title: *Life history of Pacific salmon: A focus on the freshwater life stages*

International Association for Great Lakes Research, Peterborough, Ontario (May 2008)
- Poster Title: *Species Composition and Succession of Larval Fishes in Nursery and Main Channel Areas within the Detroit River*

Student Research and Creative Endeavors Exhibition, Mt. Pleasant, MI (April 2008)
- Poster Title: Same as above

Michigan AFS Annual Meeting, Sault Ste. Marie, MI (March 2008)
- Oral Presentation Title: Same as above

68th Midwest Fish and Wildlife Conference, Madison, WI (December 2007)
- Oral Presentation Title: Same as above

AWARDS AND MEMBERSHIPS

Outstanding Thesis Award, Central Michigan University (2008)
Graduate Student Publication and Presentation Grant (2007 and 2008)
Student Research and Creative Endeavors Grant, CMU (2007)
Research Assistantship funded by Golder Associates, Inc. (2007)
Member: International Association for Great Lakes Research (2007-2008)
Member: American Fisheries Society (September 2005-2009)

VOLUNTEER EXPERIENCE

Olympia Oyster Research in Fidalgo Bay, WA (April 2013- June 2013)
- Assisted Dr. Bonnie J. Becker (PI, UW Tacoma) and her students with the collection of adult and larval oysters

Foss Waterway Seaport (May 2012-September 2012)
- Helped develop a protocol for sampling plankton and measuring water clarity
- Demonstrated the above protocol for 5th/6th grade students

Marine Mammal Stranding Network - NOAA (January 2011-Present)
- Respond to marine mammal strandings and take appropriate actions as needed

Hydroacoustic survey of smallmouth bass movement in Lake Michigan (July 2007)
- Helped a Central Michigan University graduate student locate smallmouth bass in the Beaver Archipelago

Sampling for lake whitefish larvae in the Detroit River, MI (April-May 2007)
- Assisted Dr. Edward Roseman (USGS) with larval fish sampling

Chippewa Nature Center Bioblitz, MI (September 2006)
- Demonstrated proper electrofishing techniques in Chippewa River

Fish collection, Yakima River, WA (July 2005)
- Collected juvenile chiselmouth with Dr. Paul James (CWU) using a beach seine