

Paul Schramm
W5756 Greening Rd
Whitewater, WI USA 53190
262-470-4384
pschramm@wisc.edu

Education:

M.S. Freshwater and Marine Science, University of Wisconsin-Madison, In Progress

B.S., Environmental Science – Ecology, University of Wisconsin – Madison, 2015

Teaching Experience:

Graduate Student Instructor-Limnology Lab (Zoo 316) **2016**

Research Experience:

University of Wisconsin – Madison Center for Limnology

Stream_PULSE

2016

Stream_PULSE is a collaborative project between the U.S. Geological Survey, and 8 universities nationwide looking at defining stream biomes to better understand and forecast stream ecosystem change by measuring annual metabolism.

Project Manager

- Setup and manage sensor network
- Manage Data from all sensors
- Work with groups from all collaborating agencies to analyze data

University of Wisconsin – Madison Center for Limnology

Fast Limnological Automated Measurement (FLAMe) Project **2015 to Present**

Novel instrument platform that allows analysis of high-resolution spatial patterns in aquatic systems. The project is a collaboration between the University of Wisconsin Center for Limnology (UW-CFL) and the U.S. Geological Survey (USGS).

Research Technician

- Collected water chemistry data on over 200 bodies of water in Northern Wisconsin
- Modified and optimized equipment to increase reliability and decrease sensor variability
- Managed extensive library of data taken in the field to facilitate future analysis

University of Wisconsin – Madison Center for Limnology

Crystal Lake Mixing Project

2013-2014

Whole lake manipulation to remove a cold water invasive species (Rainbow Smelt). The lake was artificially mixed to remove thermal stratification using a newly developed system, successfully removing the entire cold-water habitat for two summers. I was supported by a research fellowship from a local family. This project was run by the UW-Center for Limnology under Professor Jake VanderZanden.

Mixing System Technician

2013

- Optimized mixing sequence to maximize mixing rates
- Identified system improvements to increase reliability and mixing efficiency

- Performed maintenance on the mixing system along with trouble shooting problems as they arose to ensure 24/7 operation

Biological Field Technician

2014 to 2015

- Field sampling
- Prepared stable isotope samples
- Continuing to analyze the effects of thermal manipulation on the food web using stable isotopes
- Analyzed (identified and counted) benthic macro-invertebrates to quantify impact of a change in the environment of the invertebrates and their predators

University of Wisconsin – Madison Center for Limnology

Sparkling Lake Crayfish Removal Project

2013

A 10-year biomanipulation of Sparkling Lake performed under Professor Jake VanderZanden to remove Rusty Crayfish and test if native crayfish populations can outcompete the invasive crayfish when there is an induced harvest pressure on the invasive crayfish.

- Performed post-manipulation monitoring and trapping of the lake

Presentations:

Crystal Lake Mixing Project Outreach Presentation

2013-2014

Gave weekly presentations to the public, informing and updating them on the Crystal Lake Mixing Project and answering questions.

Leadership Experience:

Shop Head – SAE (Society of Automotive Engineers) Baja Racing, UW-Madison
Delegated tasks to team members, teaching of new teammates

2013

Lead Welder – SAE Baja Racing, UW-Madison

2013-2014

Relevant Skills:

- Proficiency in MATLAB and R programming languages
- Proficiency in ArcGis Suite and MS Office
- Data Management and Storage of large data sets
- Experience deploying and maintaining in-situ sensors
 - HOBO
 - YSI
 - Turner
 - Vaisala
 - Los Gatos Research-Portable Greenhouse Gas Analyzer
 - Precision Measurement Engineering(SCAMP)
 - Campbell Data loggers (CR Basic programming)
- Preparing, cutting and analyzing otoliths and other hard aging structures in fish
- Experience gill netting, trammel netting, beach and purse seining
- Experience operating Boats and trailering
- Open water SCUBA certified
- Welding
 - TIG certified through SAE
 - MIG certified through UW-Madison College of Engineering
 - Experience in ARC welding
- Machining Mill and Lathe – Training through UW-Madison College of Engineering Machine Shop
- CPR certified