

CURRICULUM VITAE

BENTON L. FRY

1538 John Kimbrough Blvd. College Station, TX 77845

651-269-6322, bfry@tamu.edu,

ORCID:0000-0003-2977-079X

Research Interests

Aquatic ecosystem ecology and biogeochemistry; ecology of freshwater fishes; natural resource conservation and fisheries management.

Education

Texas A&M University, College Station

Ecology and Evolutionary Biology, Ph.D

- August 2025, planned completion
- Admitted to candidacy February 2024
- GPA 4.0

University of Minnesota, Twin Cities

Ecology, Evolution and Behavior, B.S.

- December 2020
- GPA: 3.71

Awards and Honors

Texas A&M University, College Station, Texas

Ecology and Evolutionary Biology Graduate Student Research Grant

Fall 2023 & Spring 2022

- EEB Graduate Research Grant are awarded to facilitate preliminary data collection by EEB Ph.D. students.

Texas A&M University

Spring 2023

Ecology and Conservation Biology Travel Grant

- Travel grant awarded to students conducting international research

Texas A&M University

Fall 2021

HEEP Graduate Fellowship

- The HEEP Graduate Fellowship is awarded to those who demonstrate outstanding academic performance, research ability, potential and leadership qualities.

University of Minnesota, Twin Cities

Spring 2020

President's Student Leadership and Service Award

- Student Union and Activities award to recognize outstanding leadership and service to the University of Minnesota campus and surrounding communities

University of Minnesota, Twin Cities

Spring 2020

James C. Underhill Memorial Scholarship

- Awarded to conduct biological research through the University's Itasca Biological Station and Labs

Research Experience

Texas A&M University, 538 John Kimbrough Blvd, College Station, TX 77845 August 2021- Current Ecology and Evolutionary Biology Doctoral Student

- Developed novel methods for detecting fish environmental DNA in turbid Texas rivers & streams
- Led a three-month field expedition to the Essquibo River Basin in Guyana to collect data on *Cichla spp.* Population structure, diet, reproduction, and habitat use
- Mentored undergraduate student (Calvin Young) to develop an independent research project

University of Minnesota, Itasca Biological Station and Labs, Shevlin, MN January 2021-July 2021 Research Technician

- Collected and processed water samples from various lakes in Minnesota
- Maintained long-term limnological monitoring equipment
- Developed novel *in situ* methods for measuring under ice algal nutrient requirements

University of Minnesota, Itasca Biological Station and Labs, Shevlin, MN May 2020-July 2021 Underhill Scholar

- Project manager for data synthesis and analysis
- Joint project with Minnesota Department of Natural Resources to study the shifts in oxygen depletion rates in lakes following the establishment of zebra mussels (*Dreissena polymorpha*) in Minnesota Lakes
- Funded by James C. Underhill Scholarship (\$10,000)

University of Minnesota, College of Biological Sciences, Ecology, Evolution and Behavior May 2018-present

Aquatic Research Assistant

- Collected and processed water samples from various lakes in Minnesota
- Processed particulate and dissolved nutrient samples
- Provide lab and field assistance to graduate students

University of Minnesota, Itasca Biological Station and Labs, Shevlin, MN May 2019-September 2019 Summer Research Intern

- Assisted researchers with conducting various aquatic and limnological sampling
- Aided academic courses by setting up learning labs and providing hands on assistance

University of Minnesota, College of Biological Sciences, Ecology, Evolution and Behavior May 2019-September 2019

Directed Research

- Studied nutrient and temperature effects on phytoplankton growth in lakes of Itasca State Park
- Conducted *in situ* and *in vitro* experiments on what nutrients are limiting phytoplankton growth at various temperatures
- Drafted an abstract to present at ASLO-SFS 2020 Joint Summer Meeting

University of Minnesota, Biology Teaching/ Learning, Twin Cities September 2019-December 2019

Teaching Labs Assistant

- Provided daily care and maintenance for the University's zebrafish lab
- Served as an assistant to setting up academic labs

Publications

- Knoll, Lesley B., **Benton Fry**, Nicole M. Hayes, and Hailey M. Sauer. 2024. "Reduced Snow and Increased Nutrients Show Enhanced Ice-Associated Photoautotrophic Growth Using a Modified Experimental under-Ice Design." *Limnology and Oceanography* 69 (1): 203–16. <https://doi.org/10.1002/lno.12469>.

Presentation and Scientific Conferences

Oral Presentation

Ecological Integration Symposium

April 2024

Texas A&M University

- Presented on niche diversification of cryptic *Cichla* species

Poster Presentation

Texas Chapter of the American Fisheries Society

February 2024

- Presented on niche diversification of cryptic *Cichla* species

Oral Presentation

153rd Annual Meeting of the American Fisheries Society

August 2023

Grand Rapids, MI

- Presented initial findings on the size, diet and distribution of *Cichla cataractae* and *C. ocellaris* in the Essequibo River Basin, Guyana
- Networked with fisheries management professionals from all over the country

Poster Presentation

Ecological Integration Symposium

April 2022

Texas A&M University

- Presented on the determinants of hypolimnetic oxygen depletion in Minnesota Sentinel Lakes
- Networking opportunity with prominent ecologist with diverse research interests

Virtual Presentation

July 2021

Minnesota Department of Natural Resources

- Presented on the determinants of hypolimnetic oxygen depletion in Minnesota Sentinel Lakes
- Discussed future implications of my project with limnologists around the country

Virtual Presentation

January 2021

Minnesota Department of Natural Resources

- Presented on the determinants of hypolimnetic oxygen depletion in Minnesota Sentinel Lakes
- Discussed future implications of my project with limnologists around the country

Virtual Presentation

November 2020

North American Lake Management Society

- Presented on the determinants of hypolimnetic oxygen depletion in Minnesota Sentinel Lakes
- Discussed future implications of my project with limnologists around the country

Virtual Presentation

September 2020

Midwest Glacial Lake Partnership

- Presented on the determinants of hypolimnetic oxygen depletion in Minnesota Sentinel Lakes
- Networked with other limnologist to expand project beyond Minnesota Lakes

Itasca State Park, MN

August 2019

Science in Nature

- Presented on the aquatic ecology of the Headwaters of the Mississippi river through and interactive river walk
- Part of a joint outreach program between the state park and University of Minnesota

Professional Service

Itasca State Park, MN

August 2019

Wet and Wild River Days

- Hosted a table on behalf of the University of Minnesota Biological Station and Labs on how to determine the health of a lake through algae communities
- Served as the sample collector and demonstrator

University of Minnesota, St. Paul, MN

September 2017-December 2020

Alpha Gamma Rho Fraternity

- Social and Professional Agricultural Fraternity that serves to broaden and strengthen agricultural and life sciences
- President (2020) and Vice President (2019)
- National Constitution and Statutes Committee
- House Director Search Committee Chair

University of Minnesota Emergency Medical Services, University of Minnesota, Twin Cities

September 2017-September 2020

Volunteer Emergency Medical Technician

- Provide basic emergency medical care at University sponsored activities
- Provide first aid to community emergencies such as the Minneapolis protests (June 2020)
- Attend monthly continuing education courses