Kailee Berge | M.S. Student
University of Maine
School of Marine Sciences
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PRESENT POSITION

I am a M.S. student in the lab of Dr. Lisa Kerr at the School of Marine Sciences at the University of Maine. I am interested in understanding the life histories of fishes to enable better-informed fisheries management. I aim to understand how environmental changes alter life histories by quantifying growth, foraging, movement, and reproduction. My master's thesis focuses on Atlantic bluefin tuna stock identification using otolith stable isotopes, machine learning ensemble models, and isoscapes.

EDUCATION AND TRAINING

UNIVERSITY OF MAINE — Orono, ME
M.S. Marine Biology — August 2023 - Present
Thesis Topic: Natal origin assignment of Atlantic bluefin tuna using ensemble modeling and isoscapes.
Advisor: Dr. Lisa Kerr

SPATIAL SHORT COURSE — Salt Lake City, UT
Short course on stable isotopes and isoscapes — July 2024

UNIVERSITY OF WISCONSIN — Madison, WI
B.S. Zoology — September 2019 – December 2022
B.S. Conservation Biology

SCHOOL FOR FIELD STUDIES — Turks and Caicos Islands
Study abroad program focused on marine science and field research. — September 2022 – December 2022

AWARDS AND FELLOWSHIPS

- **Travel Award ($2,500)** to offset the course fees of the SPATIAL Short Course, 2024
- **Mercille J. Lee Powers-Knapp Scholarship ($54,659.60)** to attend the University of Wisconsin, 2019-2022
- **Study Abroad Scholars Award ($3,000)** to study abroad with the School for Field Studies at the Center for Marine Resources Studies, 2022

- **Jean B. and E.T. Juday Fellowship Award ($5,800)** undergraduate research on a northern-Wisconsin lake manipulation project to assess impacts of panfish on Walleye, 2021

RESEARCH EXPERIENCE

Graduate Research Assistant, University of Maine **Aug. 2023 - Present**

- Constructing ensemble models and isoscapes in R for natal origin classification
- Analyzing large datasets for trends and interpreting results in biological and fishery contexts
- Leading micromilling activities for the Gulf of Maine bluefin tuna sampling program.

Student Researcher, School for Field Studies **Aug. 2022 - Dec. 2022**

- Collected data on a variety of School for Field Studies projects.
- Completed a directed study on conch microplastics, which included field data collection, microscopy, statistical analysis in R, and multiple presentations to a variety of audiences as well as a poster at the 40th Association of Marine Laboratories of the Caribbean Scientific Meeting.

Intern, University of Wisconsin Zoological Museum-Southern Wisconsin Trout Unlimited Chapter **May 2022 - Aug. 2022**

- Conducted Wisconsin Department of Natural Resource trout surveys throughout southern Wisconsin.
- Identified, collected, and prepared fish specimens for museum use.
- Utilized seines and stream electroshocking via backpack and stream barge to sample fish.
- Interacted with various stakeholders and representatives from state scientific agencies and non-governmental organizations.

Fish Facility Technician, University of Wisconsin-Pelegri Lab **Sep. 2021 - May 2022**

- Prepared and fed specific dietary plans to lab Zebrafish.
- Upheld IACUC standards and collected regulatory data to ensure fish health.

Preparation Room Intern, University of Wisconsin Zoological Museum **Sep. 2021 - Dec. 2021**

- Collected tissue samples and data from specimens.
- Prepared turtle specimens for museum use under a standardized procedure.

Fish Ecology Field and Laboratory Assistant, University of Wisconsin Center for Limnology-Trout Lake Station **May 2021 - Aug. 2021**

- Operated and maintained UW-Madison boats, vehicles, and sampling equipment.
- Utilized mini-fyke nets, clover traps, and electrofishing to collect fish.

- Non-lethal stable isotope sampling of Walleye
- Dissected, removed otoliths, and processed fish.

CERTIFICATIONS

- Collaborative Institutional Training Initiative (CITI Program) (2024)
- CPR (2024)
- PADI Open Water Certification
- PADI Advanced Open Water Certification
- Freecodecamp Responsive Web Design Certification
- Freecodecamp JavaScript Algorithms and Data Structures Certification
- Freecodecamp Foundational C# with Microsoft

SKILLS

- Fish Sampling with seines, gillnets, fykes, electrofishing, and traps
- Fish dissections
- Environmental surveys (terrestrial, SCUBA)
- Otolith microchemistry analysis (New Wave MicroMill)
- Data management and synthesis using R programming software
- Supervised machine learning in R programming software
- Version Control in Git

PRESENTATIONS

- **Berge K**, Kerr L, Arai K. "Evaluating the utility of ensemble modeling to classifying the origin of Atlantic bluefin tuna in US waters." AFS Southern New England Chapter Meeting, January 2025
- **Berge K**, Kerr L, Arai K. "Evaluating the utility of ensemble modeling to classifying the origin of Atlantic bluefin tuna in US waters." AFS Atlantic International Chapter Meeting, November 2024
- **Berge K**, Kerr L., "Where do they come from? Sorting Atlantic bluefin tuna with an ensemble model and isoscape." School of Marine Sciences Graduate Research Symposium, May 2024
- Lowe L, **Berge K**, McLean C, Dudek K. "Microplastic contamination in Queen Conch across windward and leeward sites of South Caicos." 40th Association of Marine Laboratories of the Caribbean Scientific Meeting, May 2023
- **Berge K**, Embke H. "Large-Scale Removal of Bluegill Results in a Compensatory Recruitment Response in Subsequent Populations." University of Wisconsin Undergraduate Research Symposium, April 2022

LEADERSHIP, SERVICE, & MEMBERSHIPS

Student Lead, Steenbock Memorial Library, 2021-2022

Peer Mentor, Mercille J. Lee Powers-Knapp Scholarship, 2021-2022
Memberships:

- American Fisheries Society, 2024-Present
- The Wildlife Society, 2019-2022
- Wisconsin Chapter of Conservation Biology Student Chapter, 2019-2022
- The American Cetacean Society, 2021-2022