

EDIE NISSEN

CONTACT

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PROFESSIONAL SKILLS

- Radio telemetry
- DNA extraction and genetic Sequencing
- Data collection, research and analysis
- Specimen handling
- Lab operations
- Communication
- Overseeing the use of hazardous chemicals
- Research boat equipment preparation and handling
- SCUBA certified

RELEVANT COURSES

- Biology + Lab
- Ecology + Lab
- Evolution
- Genetics
- Statistics
- Cell and Molecular Biology
- Natural History of Invertebrates
- Herpetology
- Ichthyology
- Marine Biology
- Conservation Biology
- Research Ethics
- Conservation and ecology of freshwater invertebrates
- Conservation Genetics
- Population and Quantitative Genetics

PROFILE

A current graduate student preparing for a career in conservation genetics

EDUCATION

M.SC IN BIOLOGY, CONCENTRATION IN ECOLOGY, EVOLUTION

North Carolina State University | 2022 - Present

B.SC IN BIOLOGY, CONCENTRATION IN ECOLOGY, EVOLUTION, AND ORGANISMAL DIVERSITY | MINOR IN ZOOLOGY | 3.70 GPA

Eastern Michigan University | 2017 - 2020

EMPLOYMENT

GRADUATE RESEARCH ASSISTANT

North Carolina State University | August 2022 - Present

- Currently working on establishing a standardized SNP panel for two imperiled freshwater mussel species in and around North Carolina. Once completed, the data will be used to implement conservation practices.
- Genetic sequencing of broodstock mussels, positive controls, and negative controls.
- Field work required to obtain swabs of genetic material for sequencing.
- Presenting at conferences and other science communication opportunities

PUBLIC SCIENCE EVENTS CONTRACTOR

North Carolina Museum of Natural Sciences Raleigh, NC | September 2022 - Present

- Assist with the set-up, execution, and breakdown of some of the museum's largest public science events -- Including but not limited to Bugfest, Darwin day, Astronomy day, and Reptile & Amphibian day.
- When necessary, handle ambassador animals using correct protocol and animal handling training.
- Educate the public on subjects pertaining to the theme of the event (i.e. convergent evolution).

REPTILE AND AMPHIBIAN UNIT ASSISTANT CURATOR

North Carolina Museum of Natural Sciences Raleigh, NC | December 2021 - Present

- Assist in husbandry and maintenance of 50 species of live reptiles and amphibians displayed in 35 exhibits located throughout the Nature Exploration Center (NEC) and Nature Research Center (NRC).
- Communicate with vet staff regarding medications and treatments for the animals.
- Engage with museum guests and answer questions with the goal of educating and promoting the conservation of North Carolina's important and unique biodiversity.

RESEARCH ASSISTANT

USGS Great Lakes Research Center, Ann Arbor, Michigan | November 2018-March 2020

- Carried out functional assessments of macroinvertebrate samples from wetlands surrounding the Great Lakes
- Analyzed and recorded the diets of freshwater fish sampled from the Great Lakes to determine wetland quality
- Assisted the USGS coastal ecology program in field work collection of harmful algal bloom samples from Lake Erie- later processing and recording the data collected
- Handled and prepped boat equipment for field days
- Assisted in data analysis
- Cleaned and maintained equipment

VOLUNTEERING & UNDERGRADUATE RESEARCH

ARTHROPOD ZOO INTERN

North Carolina Museum of Natural Sciences Raleigh, NC | September 2021 - December 2021

- Helped maintain and care for 23 living exhibits
- Assisted in public education by writing articles for the museum's newsletter
- Completed a term project on limb regeneration in arthropods, later presenting to a class of vet students

UNDERGRADUATE RESEARCH ASSISTANT

Eastern Michigan University - Dr. Katherine Greenwald Research Lab, Ypsilanti, Michigan | June 2019-April 2020

- Tracked and monitored the behavior of Painted turtles using radio telemetry for a undergraduate project involving the effects of a dam removal
- Assisted graduate students with field work and lab duties
- Article will appear in the Natural History Notes section of Herpetological Review

MEMBERSHIPS & COMMITTEES

FRESHWATER MOLLUSK CONSERVATION SOCIETY

September 2022 - Present

NORTH CAROLINA HERPETOLOGICAL SOCIETY

March 2024 - Present

NORTH CAROLINA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

January 2023 - Present

- 2023 Annual Meeting - Presented a lightning talk on establishing a standardized SNP panel for two imperiled North Carolina mussel species
- 2024 Annual Meeting - presented a poster on the advancement of conservation genetic tools for freshwater mussel conservation

STUDENT CHAIR FOR APPLIED ECOLOGY SEMINAR COMMITTEE

September 2023 - Present

- Assist the Applied Ecology seminar committee with organizing and coordinating seminar speakers
- Tasked with coordinating seminar speakers for the 2024 fall semester