

# Midwest Partners in Amphibian and Reptile Conservation (MWPARC) Student Travel Grant Report 2024

**Awardee:** Kerri Beers

**Professional association:** St. Cloud State University

**In one or two paragraphs, describe the work you participated in that was facilitated by this award.**

Over the summer, I swabbed anurans in the family Ranidae for the chytrid fungus *Batrachochytrium dendrobatidis* (Bd). My focus for this project is to investigate how species within the family Ranidae differ in Bd loads and Bd presence. Sampling was done at 6 locations in central and northern Minnesota. My goal was to swab at least twenty of each of the following species at each location: Green Frogs (*Lithobates clamitans*), Northern Leopard Frogs (*L. pipiens*), Wood Frogs (*L. sylvaticus*), and Mink frogs (*L. septentrionalis*). By the end of the summer, I was able to swab a total of 253 anurans. All anurans were swabbed following the non-invasive swabbing methods from the Student Network for Amphibian Pathogen Surveillance (SNAPS) program (<https://snaps.amphibiandisease.org/>). Bd swabs will be processed by the USGS Wildlife Health Center in Madison, Wisconsin. Future work will include sampling *L. sylvaticus* during their breeding season in early spring 2025 to investigate how Bd load varies between breeding and non-breeding season populations. Data analysis from swabs collected this summer will begin as soon as we get the data back from our USGS collaborators. I hypothesize that since more terrestrial species spend less time in aquatic environments, they will have less Bd loads and prevalence than more aquatic species. This work will hopefully expand our knowledge on how Bd differs within anuran families and how different life histories can affect Bd loads and presence.



**How has this work aided you in achieving your career goals?**

This project aligns with the requirements necessary for my master's degree and completion of my thesis. The fieldwork for this project has allowed me to gain confidence and communication skills when leading groups of people as a biologist. During fieldwork, I instructed volunteers on how to catch, handle, and swab frogs properly following SNAPS protocols. This project has allowed me to diversify my fieldwork experience with hands-on learning by collecting data from animals and the environment. This project has increased my knowledge of the diverse life histories of species in the family Ranidae. Lastly, I will be using R studio to analyze my results, expanding my knowledge of R code and statistical tests that can be used in my future career. The skills and knowledge I have learned from this project will benefit me in my potential future career with State or Federal wildlife agencies after I graduate. Thank you again to MWPARC for your support.

**Image description:** Kerri, wearing chest waders and gloves, holds a Mink Frog.