Beth Adler

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EDUCATION

Bachelor of Arts in Biology, Emphasis in Biodiversity [GPA 3.41] *May 2025*
Webster University, St. Louis, MO
Thesis: *Monitoring Grassland Avian Populations in the Mississippi Flyway*

HONORS

Dean's List *Spring 2021*
Webster University *Spring 2023*
Awarded to Students with a Semester GPA ≥ 3.80 *Fall 2024*

RESEARCH EXPERIENCE

Bee Field Guide Project – Independent Research *2024 - Present*

- Combine illustration and research to characterize bee anatomy, diversity, and ecological niches.
- Advised by faculty mentor specializing in plant-pollinator interactions.
- Produce materials for a humorous, scientifically grounded field guide; grant proposal submitted.

Monitoring Grassland Avian Populations in the Mississippi Flyway - Thesis *2024*

- Accompanied point-count surveys conducted by USACE biologists in wetland habitats near Mississippi River, assisted field data collection.
- Analyzed multi-year avian observational data in R, calculating alpha and beta diversities, differential abundance analyses, and creating Uniform Manifold Approximation Projections (UMAPs) to compare variables of diversity across habitat sites.
- Delivered a scientific paper discussing independent findings and a 30-minute presentation to department faculty.

CONFERENCE PRESENTATIONS

"Learning Science through a Creative Communication Project" Poster Talk
Botanical Society of America conference, Grand Rapids, MI *2024*
Research Across Disciplines symposium, Webster Groves, MO *2024*

PROFESSIONAL EXPERIENCE

Forest Pest Surveyor, Spongy Moth *2025*

Missouri Department of Conservation, St. Louis, MO

- Monitored for invasive spongy moths through independent placement and retrieval of >350 pheromone traps, using a GIS grid system to appropriately cover St. Louis County and neighboring areas as needed.
- Communicated with private landowners to request access and represent the agency professionally in public settings.
- Contributed to conservation efforts in other departments involving habitat maintenance, Lindgren trap monitoring, and public outreach.

Ski Instructor *2024 - Present*

Snowshoe Mountain, Snowshoe, WV

- Teach skiing techniques to groups of children aged 4-12, ranging from beginner to advanced, emphasizing safety and fun in hazardous winter environments.
- Effectively communicate to instruct, motivate, and manage groups in dynamic outdoor settings for several hours at a time.

Canoe / Trail building Guide and Winter Camping Interpreter *2022 – 2024*

Northern Tier High Adventure, Ely, MN

- Led service-based, multi-week canoe expeditions for participants aged 16-20, teaching outdoor skills including portaging, navigation, and backcountry ethics.
- Oversaw trail building projects with guidance from USFS. Gave instructions for proper use of tools necessary to complete efforts.
- Guided multi-day winter treks which involved safely camping on frozen lakes and various cold-weather skills.

Wilderness Trail Crew *2022*

Wisconsin Conservation Corps, Isle Royale National Park, MI

- Used hand tools to build and maintain trails alongside National Park Service staff in a remote island wilderness area.
- Lived and worked in a tight-knit backcountry crew to complete conservation projects that support public land recreation and management.

UNIVERSITY SERVICE

Swim Instructor / Lifeguard *2022 – 2024*

Webster University Pool

- Taught individual and group swimming lessons for children ages 4–12 in the local community, providing age-appropriate instruction and fostering water safety skills.
- Assisted with community aquatic programs, ensuring safety and accessibility for patrons.