

Jenna Ruoss

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EDUCATION

University of Nebraska- Lincoln – Lincoln, NE Expected date of graduation 2026
Ph.D. in Natural Resource Sciences, Concentration - Applied Ecology
– The role of flow dynamics on habitat selection and movement of Pallid Sturgeon in the lower Platte River

Ball State University – Muncie, IN 2020
M.A. in Biology
– Does land-use affect the host-diversity-begets-parasite-diversity hypothesis?

Kutztown University of Pennsylvania – Kutztown, PA 2018
B.Sc. in Environmental Science, Concentration – Biology (Summa Cum Laude)

PEER-REVIEWED PUBLICATIONS

4. Mapes, C. C., J. Falkowski, G. P. Setliff, K. Gallagher, J. P. **Ruoss**, L. Mortensen, E. Hinkle, R. Beard, and R. Hilger. *in review*. Bees nesting in insect galls and a description of a novel nesting site for *Megachile montivaga* Cresson, 1878 (Hymenoptera: Megachilidae) in goldenrod ball galls.
3. **Ruoss**, J. P., B. E. Mason, M. R. Wuellner, and K. D. Koupal. 2023. Resetting the clock: how a reconnection event re-shaped cove fish assemblages in a Nebraska reservoir. *North American Journal of Fisheries Management* 43: 327-338.
2. **Ruoss**, J. P., and R. J. Bernot. 2022. A survey of freshwater fishes and their parasites throughout Delaware County, Indiana. *Proceedings of the Indiana Academy of Science* 130(2): 156-162.
1. Mapes C. C., J. P. **Ruoss**, and K. Tessier. 2019. The relationship between gall size and sizes of selected inhabitants of the ball gall of *Eurosta solidaginis* on *Solidago altissima*. *Formosan Entomologist* 38: 78-87.

TECHNICAL REPORTS

5. **Ruoss**, J., C. Pullano, and M. Pegg. 2023. Pallid Sturgeon Biology in the Platte River and its Tributaries Annual Progress Report (Year 2: 2023). Prepared for Governance Committee. University of Nebraska-Lincoln.
4. **Ruoss**, J., C. Pullano, and M. Pegg. 2022. Pallid Sturgeon Biology in the Platte River and its Tributaries Annual Progress Report (Year 1: 2021-2022). Prepared for Governance Committee. University of Nebraska-Lincoln.
3. **Ruoss**, J.P., L. Dietrich, and H. Wall. 2021. Lake McConaughy Fish Kill Report. Nebraska Game and Parks Commission.
2. **Ruoss**, J. P., and K. Koupal. 2021. Stone Ridge Fish Kill Report. Nebraska Game and Parks Commission.
1. **Ruoss**, J.P., and K. Koupal. 2021. Nebraska Field Biologist Guide to Common Fish Parasites. Nebraska Game and Parks Commission.

PROFESSIONAL EXPERIENCE

University of Nebraska-Lincoln
Graduate Research Assistant

Lincoln, NE
January 2022-

Supervisor(s): Dr. Mark Pegg & Dr. Jonathan Spurgeon

Investigating the movements and ecology of Pallid Sturgeon in the lower Platte River system using acoustic telemetry.

University of Nebraska-Lincoln

Research Technician

Supervisor(s): Dr. Mark Pegg & Dr. Jonathan Spurgeon

Conducting range tests using an Innovasea VR-100 receiver equipped with a VHTx omnidirectional transponding hydrophone, VR2Tx receiver, V16 and V13 range test transmitters, and Garmin eTrex handheld GPS unit on the Platte River. Determining detection ranges using ArcGIS. Assisting Nebraska Game and Parks Commission Missouri River Crew with surveying Pallid Sturgeon using baited trotlines on the Missouri River. Maintaining boats, motors, trailers, trucks, and other equipment.

Lincoln, NE

November 2021-January 2022

Nebraska Game and Parks Commission

Conservation Technician II, Fisheries Division

Supervisor(s): Dr. Keith Koupal & Brad Eifert

Leading a research project concerning how cove connectivity affects fish assemblages in Harlan County Reservoir. Developing a parasites of fishes guide for local hatcheries and fisheries biologists. Assisting with standard sampling surveys using backpack electrofishing, boat electrofishing, gillnets, trap-nets and recording lengths. Collecting, identifying, and enumerating larval fish using ichthyoplankton nets. Aging fish using otoliths and scales. Assisting hatcheries with Walleye spawn and stocking. PIT-tagging several fish species for tracking temporal and spatial movements. Collecting water chemistry data such as chlorophyll α , pH, nitrates, phosphates, and turbidity using Van Down Sampler, Colorimeter, Aquafluor, and Secchi disk. Building Georgia cubes to deploy as alternative fish habitat. Selling fishing and hunting licenses as well as providing customer service. Maintaining and repairing boats, trailers, and nets.

Kearney, NE

February-October 2021

Midwest Biodiversity Institute

Fisheries Technician

Supervisor(s): Paul DeRolf

Conducting fish surveys in lotic systems throughout Illinois and Ohio using backpack, tote-bergs, long-line, and boat electrofishing with a 3-person crew. Identifying, weighing, and enumerating all fish species collected. Working 8+ hour days in all weather conditions over rough terrain. In-field fixing of equipment such as soldering electrical wires or patching nets.

Hilliard, OH

July-October 2020

Ball State University

Teaching Assistant

Supervisor(s): Dr. Cassie Martin & Dr. Allison Rober

Teaching multiple sections of lab for *Principles of Biology II*. Reinforcing lecture concepts through hands-on activities on subjects ranging from natural selection to dissections of organisms. Assisting lecture during active learning engagement activities. Guiding other teaching assistants on how to successfully teach lab.

Muncie, IN

August 2018-May 2020

Kutztown University of Pennsylvania

Supplemental Instructor

Supervisor(s): Dr. Julie Palkendo & Dr. Carol Mapes

Tutoring peers for the classes *Introduction to Botany* and *Environmental Analysis*.

Kutztown, PA

August 2017-May 2018

Kutztown University of Pennsylvania

Undergraduate Research Assistant

Kutztown, PA

June-August 2017

Supervisor(s): Dr. Alexander Hernandez

Sampling aquatic macroinvertebrates using Surber samples and sieves. Using rose Bengal to sort aquatic macroinvertebrates under a dissecting scope. Collecting and identifying freshwater fishes using backpack electrofishing and seining. Using trail cameras to determine species richness and diversity of terrestrial vertebrates within a local riparian zone.

Philadelphia Zoo

Environmental Education and Animal Behavior Intern

Supervisor(s): Dani Hogan

Philadelphia, PA

January-April 2017

Engaging with zoo patrons at exhibits using “Explorer Stations” and answering questions. Conducting an observational research project of an animal of choosing that would benefit the zoo’s knowledge of said animal (animal chosen – Western Lowland Gorilla).

RELATED SKILLS

- Use and maintenance of trotlines, gillnets, trap nets, seine nets
- Boat, backpack, and long-line electrofishing
- PIT and acoustic tagging
- Installing and maintaining acoustic telemetry arrays
- Scale and otolith collection, preparation, and aging
- ArcGIS Pro, ArcMap, Microsoft Office applications, R/R Studio, Fathom, Vue
- Boat operation – outboard, airboat, jet

COMPETITIVE GRANTS FUNDED

Robert A. Klumb Student Travel Award (\$400)	March 2024
Ball State University ASPIRE Student Travel Award (\$450)	January 2020
Kutztown University Research Fund (\$900)	February 2018
Kutztown University BEARS Grant (\$2000)	May 2017

PRESENTATIONS

Ruoss, J., C. Pullano, M. Pegg, J. Spurgeon, and K. Steffensen. Investigating environmental cues for Pallid Sturgeon entry and exit for a Missouri River tributary. Oral Presentation. Missouri River Natural Resources Conference, Nebraska City, Nebraska. March 2024.

Ruoss, J., C. Pullano, M. Pegg, J. Spurgeon, and K. Steffensen. Pallid Sturgeon movement in the lower Platte River and its tributaries: Year 2 update. Poster Presentation. 84th Midwest Fish and Wildlife Conference, Souix Falls, South Dakota. January 2024.

Ruoss, J. Monitoring Pallid Sturgeon in the lower Platte River. Oral Presentation. University of Nebraska at Kearney. April 2023. **Invited Guest Lecturer.**

Pullano, C., J. Ruoss, J. Spurgeon, M. Pegg. Monitoring Pallid Sturgeon in the lower Platte River and its Tributaries. Poster Presentation. 83rd Midwest Fish and Wildlife Conference, Kansas City, Missouri. February 2023.

Pullano, C., J. Ruoss, J. Spurgeon, M. Pegg. Monitoring Pallid Sturgeon in the lower Platte River and its Tributaries. Poster Presentation. Nebraska American Fisheries Society Annual Meeting, Ponca, Nebraska. January 2023. **Best Student Poster Presentation.**

Ruoss, J., B. Mason, M. Wuellner, and K. Koupal. Reversing what time has taken away: Mother Nature’s experiment with Cove Connection in Harlan County Reservoir, Nebraska. Oral Presentation. Nebraska American Fisheries Society Annual Meeting, Grand Island, Nebraska. January 2022.

Ruoss, J. Oh My Cod – My Journey to Fisheries! Oral Presentation. Wilson High School, Reading, Pennsylvania. November 2021. **Invited Guest Lecturer.**

- Ruoss, J, and R. Bernot. Does land-use affect the host-diversity-begets-parasite-diversity hypothesis? Poster Presentation. 80th Midwest Fish and Wildlife Conference, Springfield, Illinois. January 2020.
- Ruoss, J. Parasites – They Are What You Eat. Oral Presentation. Conrad Weiser Science Research Institute, Robesonia, Pennsylvania. July 2019. **Invited Guest Lecturer.**
- Ruoss, J, and R. Bernot. Does land-use affect the host-diversity-begets-parasite-diversity hypothesis? Poster Presentation. Ball State Student Symposium, Muncie, Indiana. April 2019.
- Ruoss, J., and A. Hernandez. An assessment of terrestrial vertebrate biodiversity and population density in a riparian zone along Sacony Creek, Berks County. Oral Presentation. Kutztown University’s Environmental Conference, Kutztown, Pennsylvania. April 2018.
- Ruoss, J., and A. Hernandez. An assessment of terrestrial vertebrate biodiversity and population density in a riparian zone along Sacony Creek, Berks County. Oral Presentation. Commonwealth of Pennsylvania University Biologists 49th Annual Meeting, Mansfield, Pennsylvania. April 2018.
- Ruoss, J., and A. Hernandez. The relationship between gall size and sizes of selected inhabitants of the ball gall of *Eurosta solidaginis* on *Solidago altissima*. Poster Presentation, Commonwealth of Pennsylvania University Biologists 49th Annual Meeting. Mansfield, Pennsylvania. April 2018. **Best Student Poster Presentation.**
- Ruoss, J., and C. C. Mapes. The relationship between gall size and sizes of selected inhabitants of the ball gall of *Eurosta solidaginis* on *Solidago altissima*. Poster Presentation. Undergraduate Research Day at the Capitol, Harrisburg, Pennsylvania. April 2018.
- Ruoss, J., K. Tessier, and C. Mapes. The relationship between gall size and sizes of selected inhabitants of the ball gall of *Eurosta solidaginis* on *Solidago altissima*. Poster Presentation. 7th International Symposium on Cecidology, Taiwan. March 2018.

SERVICE

Rinard Orchid Greenhouse, <i>Docent</i>	July-September 2019
East Central Indiana Science Fair, <i>Judge</i>	February 2019/2020
Kutztown University’s Annual Earth Day Celebration, <i>Organizer</i>	April 2018

Manuscript Reviewer: North American Journal of Fisheries Management, Prairie Naturalist

CERTIFICATIONS

First Aid/CPR, <i>Pulse Finders</i>	January 2024
Motorboat Operator Certification Course (Airboat), <i>USGS</i>	March 2022
In/Over the Water Safety, <i>USGS</i>	November 2021
Motorboat Operator Certification Course (General), <i>USGS</i>	November 2021
Watercraft Inspection and Decontamination II, <i>PSMFC</i>	May 2021
BoatU.S. Foundation’s Online Boating Safety Course	July 2020