

Arkansas Agriculture, Forests, and Water Conference

July 22 - 24, 2025



POSTER PRESENTATION ONLY

Tuesday, July 22

Water Research Poster Session

Submitted:

1. Effects of Reservoir Draining on Sediment Nutrient Cycling, Karessa De La Paz, University of Arkansas
2. Assessment of the Climate Change Impact on Stream Flow and Sediment Load Dynamics for the Arkansas River, Andre Shelby, University of Arkansas Pine Bluff
3. Development of Zwitterionic Dendrimer-functionalized Magnetic Nanoparticles for Cationic and Anionic Dye Adsorption, Olufemi Ogunjimi, University of Arkansas
4. Long-term Nutrient Impacts of the Afforestation of Agricultural Lands, Kathleen J. Cutting, University of Arkansas
5. Fate of intra and extracellular antibiotic resistance genes through wastewater treatment, Samia Parveen, University of Arkansas
6. DNA-Based Monitoring of Harmful Algal Blooms, Wafa Youssfi, University of Arkansas
7. Required Ash Removal from a Wastewater Pond Likely Resulted Harmful Algal Blooms, BENG 49703 59703, University of Arkansas
8. Cyanobacterial Harmful Algal Blooms at Lake Fayetteville, Five Years of Study, Arkansas Water Resources Center
9. Investigating Riparian Soil-Plant Nutrient Dynamics in Forested and Agricultural Land Uses Along the Ouachita River, Maggie Herrmann, University of Arkansas

AWRC Water Fellows

10. Assessing Water Quality in Kernza-Based Filter Strips with Poultry Litter Treatment using Rainfall Simulation, Dario Cano, University of Arkansas
11. Linking Watershed Characteristics to Stream Nutrients Concentrations within the War Eagle Creek Watershed, Emma Busteed, Arkansas Water Resources Center
12. Nitrous Oxide Emissions from Tailwater Recovery Systems, Auldyn Faulk, University of Arkansas
13. Unpaved Road Impacts on Sediment Loss in a Rural Watershed, Rachel Haley, University of Arkansas
14. Evaluating the Accuracy of iPhone LiDAR for Stream Morphology Analysis in the Ozarks, Lily Stitt, University of Arkansas

CHEG REUs

15. qPCR Analysis of Phycocyanin and Microcystin-E genes for Identification of Harmful Algal Blooms, Hai Lam Huynh, Northwest Arkansas Community College
16. Extraction of Lanthanides using Natural Zeolites, Lachan Morlan, Northwest Arkansas Community College
17. Removal of PFAS by Magnetically Modified Fly Ash, Finn Jones, Tulsa Community College
18. Effects of Surface Chemistry on Molecular Level Ion Behavior at Aqueous Interfaces, Aroshe Wickramasinghe, Cornell University

Watershed Sponsors:



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POSTER PRESENTATION ONLY

Wednesday, July 23

EcoREU Research Poster Section

EcoREUs:

1. Investigating Nutrient Loss in Arkansas Rice Fields Under Alternate Wetting and Drying Irrigation, Kalen Strunk, Oklahoma State University
2. Evaluation of Autonomous Recording Units detection in Varying Habitats, Delilah Nguyen, University of North Texas
3. Salt's Impact on Stream Life, Cale Prosen, College of Saint Scholastica
4. Evaluating DNA Extraction Kits for Detecting Salmonella in Poultry Waste Using qPCR, Courtney Norwood, University of Tennessee Southern
5. Effects of Urbanization on Space Use and Survival of a Resident Forest Owl, Christian Machen, University of Arkansas
6. The Influence of Adult Feeding Rates on Offspring Inflammatory Cytokine Production, Vansh Singhal, University of Arkansas
7. Effects of Increasing Salt Additions on Riparian Soil Invertebrates, Microbes, and Plants, Vien Tran, University of North Texas
8. Effects of the Developmental Light Environment on Adult Flower Color Preference in *Junonia coenia*, Lillian Ruesink, Siena Heights University
9. Effect of Landuse on Syrphidae Diversity and Larvae Feeding Guild Composition, Austin Kaplan, Hood College
10. A Botanical Inventory of a Restorable Grassland, Kirsten Kierum, Arizona State University
11. Correlations between Wing Morphology and Behavioral Patterns in *Junonia coenia*, Lindsey Maurer, Rochester Institute of Technology
12. How Do Average Temperature and Thermal Variation Act Independently and Interactively to Influence Ectotherm Psychological Performance?, Kohl Thomas, University of Arkansas Pine Bluff
13. Thread-trailing Three-toed Box Turtle Movements within a Wet Prairie and Solar Array, Ruben Jimenez, University of Michigan Dearborn
14. The Influence of Adult Feeding Rates on Offspring Inflammatory Cytokine Production, Salvador Barraza, University of Arkansas

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