

July NGRREC Neighbor Nights To Highlight Intern Projects

June 28 2021 3:25 PM



EAST ALTON– The National Great Rivers Research and Education Center will be highlighting the work of its interns and staff during a special July Neighbor Nights event.

Rather than viewing a presentation, guests will make their way through the Jerry F. Costello Confluence Field Station to view exhibits and table presentations at their own pace.

The event will run from 6-8 p.m., with free, guided public tours of the Field Station beginning at 6:15 p.m. and 7:15 p.m.

“We are thrilled to highlight many of our interns and their exciting research projects taking place this summer,” said Environmental Educator Jen Young. “This is a great opportunity for our interns to show what they are learning and for the community to be able to learn from this bright group of students.”

This year’s intern class has 22 members – 14 are part of the traditional summer internship program and eight are a part of the Research Experience for Undergraduates (REU) internship program.

NGRREC’s traditional program is a 9-week paid internship managed by an advisor who is responsible for instruction, supervision, and mentoring of the intern, as well as the design of the summer project. REU interns are supported by the National Science Foundation (NSF), and their projects focus on a modern integrative approach to studying wetlands using recent technological and theoretical developments with a goal of unifying wetland science across scales. More information is available at www.ngrrec.org/REU.

NGRREC interns represent a number of different colleges and universities, including Lewis and Clark Community College, Southern Illinois University Edwardsville, University of Illinois Urbana-Champaign, Washington University, University of Missouri, University of Wisconsin-Madison, University of Georgia, Emory University, Louisiana Tech and more, studying a variety of fields including environmental science, ecology, wildlife, food science, data analytics, environmental education, biology and more.

They include local students, as well as students from across the country and far away as Georgetown, Guyana.

Lewis and Clark Community College student Jacob Decker is a part of the traditional intern program this year. His research focuses on the effects of aerial herbicide applications to control invasive bush honeysuckle on medium- and large-size mammals in sprayed sites compared to non-sprayed control sites. Research sites are located at Pere Marquette State Park, Beaver Dam State Park, Lewis and Clark Community College, and two Illinois Recreational Access (IRAP) private properties, each within a 90-mile radius of NGRREC.

“My main method of collecting data from different sites on private and public lands will be using camera traps to capture mammals and taking vegetative samples around the camera deployment location,” Decker said. “Very little research has been conducted or

published on wildlife response to aerial herbicide spraying. This project gives major importance for not only research purposes but the stakeholders for IRAP too, in making sure the management practices are not having negative effects on the native wildlife.”

Annette Marshall, also an L&C student, is participating in the REU program. Marshall’s project seeks to determine if wetlands can be viable options for carbon sequestration in the future as the climate changes.

“I will be sampling soil from a 66-acre mitigated wetland managed by Great Rivers Land Trust and analyzing soil samples for organic carbon sequestration,” she said. “These soils will also be analyzed for nitrogen and phosphorus content and will provide benchmark data as the project goes forward through the years. Additionally, I will be sampling soil from an approximate 500-acre site in Calhoun County along the Illinois River that Great Rivers Land Trust will begin mitigating for a wetland. Soil from this former agriculture production site will also be analyzed for organic carbon sequestration, nitrogen, and phosphorus content. These data sets will also provide benchmarks as the project goes forward.”

Other intern projects include RiverWatch Discovery, incorporating citizen science into community colleges; assessing the removal efficiency of bioavailable phosphorus from agricultural runoff by bioswales; nutrient distribution and cycling across the Mississippi River’s channel and floodplain; land use effects on bird-voiced treefrog populations in southern Illinois; plastic deposition and degradation in the Mississippi River Floodplain and more.

Visit www.ngrrrec.org/Internship/ to find out more about the internship programs.

Registration is not required for Neighbor Nights, but is recommended. RSVP today at www.ngrrrec.org/neighbor_nights/.

For more information on either, contact Director of Environmental Education Sarah Fisher at saafisher@lc.edu.

National Great Rivers Research and Education Center (NGRREC?)

Founded in 2002 as a collaborative partnership between the University of Illinois at Urbana-Champaign and Lewis and Clark Community College, The National Great Rivers Research and Education Center is dedicated to the study of great river systems and the communities that use them. The center aspires to be a leader in scholarly research, education, and outreach related to the interconnectedness of large rivers, their floodplains, watersheds and their associated communities.