



NGRREC Mesocosms Available for Research Projects

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EAST ALTON – The National Great Rivers Research and Education Center (NGRREC) is requesting proposals for research projects, which can utilize the mesocosms at the Jerry F. Costello Confluence Field Station in East Alton, Illinois.

Mesocosm is a general term for an experimental tool that allows a small part of the natural environment to be emulated under controlled experimental conditions, allowing

scientists to conduct unique studies. NGRREC's mesocosms provide a place to roughly simulate river conditions so studies can be completed to further our understanding of river organisms, hydrology, and the transport of sediment and nutrients.

The Field Station's three concrete mesocosms are each 50 feet long by 12 feet wide and can be supplied with Mississippi River water at a rate of up to 4 million gallons per day. The river water is unfiltered so that it contains intact planktonic communities, suspended sediments and nutrient concentrations identical to those of the Mississippi River.

Each of the three mesocosms can be set up in multiple ways, including standing ponds, independent raceway channels (50 feet long by 6 feet wide), meandering channels, or other configurations a researcher might desire.

NGRREC is soliciting project proposals from qualified researchers who will utilize the mesocosms in summer of 2015. For selected projects, NGRREC is offering use of these unique mesocosms for no cost during its initial year of operation, but researchers must understand that they are in the early stages of use. The possibility exists that the pumps or other mechanics may malfunction for reasons of which NGRREC employees are unaware.

Duration of the projects will be an important factor in scheduling multiple partner usage. Due to uncertainties, researchers should adopt a flexible approach and be cautioned that unexpected issues may arise that might cause a scheduling delay. The mesocosm schedule will be available at www.ngrrec.org/mesocosms.

Preference will be given to projects that utilize the unique features of this facility; to studies that are collaborative in nature; to the significance of the problem being addressed; to the overall feasibility and relevance of the research.

Proposals must be submitted by midnight on April 30, 2015. Proposals submitted after April 30 will be considered based on mesocosm availability. Proposals will be evaluated by the NGRREC administration, and awards will be based on recommendations from a scientific review committee.

For more information, or to download the Mesocosm Request Form, please visit www.ngrrec.org/mesocosms. For more details, contact Ted Kratschmer, Field Station Manager, at (618) 468-2840.

The National Great Rivers Research and Education Center is a partnership of Lewis and Clark Community College and the University of Illinois at Urbana-Champaign.