



PH.D. GRADUATE RESEARCH ASSISTANTSHIP: QUANTIFYING RIVER HABITAT

Missouri Cooperative Fish and Wildlife Research Unit
The School of Natural Resources, University of Missouri

Position title: PhD Research Assistantship developing a mid-sized river habitat sampling protocol.

Agency/location: Missouri Cooperative Fish/Wildlife Research Unit, The School of Natural Resources, University of Missouri, Columbia, Missouri

Responsibilities: We seek a PhD student to 1) help determine the most efficient and cost-effective technologies to collect biologically-relevant non-wadable river habitat, 2) collaborate with team members (including another PhD student in MU Electrical Engineering and Computer Science) to use deep learning techniques to automate the delineation of habitats from imagery, and 3) recommend a riverine habitat sampling protocol to complement a recently-developed fish sampling protocol that meets the needs of agency managers. We will use various technologies such as drones, side-scan sonar, acoustic Doppler current profiler, and a 360-degree camera to map habitat in the field with the goal of selecting a subset of those technologies as a final habitat sampling protocol that is logistically feasible and relevant to managers. The selected candidate will work directly with Dr. Craig Paukert (U.S. Geological Survey, University of Missouri), but will be expected to interact regularly with students and faculty in Computer Science and Engineering, and biologists with the Missouri Department on Conservation or other agencies. The selected student will be expected to conduct field work in Missouri rivers, operate motorized boats, knowledge of (or willingness to learn about) various technologies used for mapping habitat, work as part of a diverse team, and present/publish their work. Selection of student contingent on final funding approval.

Qualifications: MS in fisheries, ecology, or related program, minimum of GPA of 3.2 in last 2 years. Preference will be given to candidates with 1) experience operating boats, 2) interest in using research to solve management problems, 3) knowledge of (or willingness to learn about) various technologies used for mapping habitat, 4) work with management agencies, and 5) demonstrated ability to present/publish research results.

Stipend: 24,394/year; includes tuition waiver and health insurance.

Closing date: Review begins June 15, 2022, and open until filled. Start date of August 2022 or January 2023.

Contact: Send letter of interest, resume, contact information for three references, and copy of transcripts (unofficial and email OK) in one document to Craig Paukert, Missouri Cooperative Fish and Wildlife Research Unit, The School of Natural Resources, University of Missouri-Columbia. 573-355-6900; paukertc@missouri.edu; webpage: <http://riverstudies.com/>. Please label email "River habitat PhD" as I am announcing two PhD positions.