

PhD Graduate Research Assistantships in Landscape and Ecosystem Ecology

Two Ph.D. research assistantships are available in the lab of Jennifer Fraterrigo (Department of Natural Resources and Environmental Sciences, University of Illinois at Urbana-Champaign). For more information on research in the Fraterrigo lab, please visit: <http://landscape.nres.illinois.edu>

One position will focus on species distribution modeling, working with landscape ecologists and economists on a NSF-funded project to develop, test, and apply tools for managing conservation risk associated with climate uncertainty. The successful student will: (1) help to construct spatial datasets for spatial portfolio analysis, which aims to allocate conservation investments between different parts of a conservation planning area to reduce future conservation risk from climate change by spreading conservation lands strategically between multiple areas; and (2) perform research to address how non-climate factors (e.g., land use, geomorphic factors, dispersal) affect species distributions. The ideal candidate will possess a Master's degree by the starting date and prior research experience and/or demonstrated competency in spatial analysis, statistical modeling, and database management. Experience with R and spatial ecological modelling is also desirable. Strong writing skills, the ability to communicate effectively, and the desire to work in a team are essential.

Another position will focus on understanding plant-soil interactions and their effects on carbon cycling in relation to changing moisture and nutrient regimes. Desirable qualifications include experience measuring microbially mediated processes, excellent written and oral communication skills, basic knowledge of quantitative methods in ecological research, and an interest in field based research. Applicants should have a GPA of at least 3.25 and satisfactory GRE scores (verbal/quantitative: >70%, analytical writing= 4.0). Applicants with a Master's Degree in ecology, botany, forestry, or related field are preferred.

Each assistantship will have a duration of 5 years starting in August 2015 and includes a stipend of \$21,000 per annum, fringe benefits and tuition waiver.

Consideration of applications begins immediately. Please email the following to Jennifer Fraterrigo (jmf@illinois.edu): (1) a cover letter describing your research interests, goals and relevant experience, (2) a complete CV, and (3) unofficial college transcripts and GRE percentiles. Suitable candidates will be required to apply to the graduate program within the Department of Natural Resources and Environmental Sciences (<http://nres.illinois.edu>) or the Program in Ecology, Evolution, and Conservation Biology (<http://sib.illinois.edu/peec/>) by Jan. 1, 2015.