

PhD Graduate Research Assistantship on Analyzing Forest Biomass Using Spatial Modeling and GIS Analysis

We are looking for a PhD graduate research assistant in the School of Natural Resources at the University of Missouri to work on a multi-faceted project, Assessing Potentials of Aboveground Forest Biomass using Historical Records and Modern Forest Management for Missouri Private and Public Forests.

The objectives of the project are to 1) determine departures and prioritize areas with high potentials to increase aboveground forest biomass, and 2) investigate how existing knowledge of forest management practices such as prescribed burn, thinning, and planting can be used to improve aboveground forest biomass.

In our existing projects, we have developed statistical and GIS-based methodologies that map statewide aboveground forest biomass from General Land Office witness tree data (~1830) and forest inventory and analysis data (~2000). Results from these methods can be used to study objectives 1. Over the past years, we have also developed LANDIS PRO, a spatially explicit forest landscape model. LANDIS PRO can be used to study objective 2 to conduct simulation experiments and evaluate effects of harvest, planting, prescribed burn, and thinning on aboveground forest biomass.

Qualified applicants should have a M.S. in forestry, ecology, biology, or a closely related discipline, a GPA > 3.2, and combined verbal and quantitative GRE scores > 1100. Applicants will have knowledge and skills in at least some of the following: GIS; computer programming (i.e. R, SAS, Python); dynamic landscape models such as LANDIS; landscape and forest ecology in Midwestern, oak and oak-pine forests. Position is available May 2010. Review of applications begins immediately and continues until the position is filled.

Please submit applications including a cover letter describing your interest and experience in these areas, a resume, and names and contact information of three references, copies of transcripts and GRE scores (unofficial at this time are acceptable). All applications should be sent to:

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