PhD/MS Assistantship – Economics of Planting in the Central Hardwoods

Contact: Mike Saunders, Associate Professor of Hardwood Silviculture (msaunder@purdue.edu) or Mo Zhou, Assistant Professor of Forest Economics & Management (mozhou@purdue.edu)

Purdue University’s Department of Forestry and Natural Resources in West Lafayette, Indiana, is seeking applicants for a Ph.D. or M.S. assistantship in forest management, forest economics or silviculture either in January or August 2019. This project, expected to be funded by the Hardwood Tree Improvement and Regeneration Center (HTIRC), will result in a generalized economic model of plantation establishment for the Central Hardwood Forest Region.

Specifically, the successful candidate will use existing growth data collected from over 200 long-term tree improvement trials and 130,000 individuals throughout the Central Hardwood Forest Region. As these trials include an array of different species on differing site qualities, and with different cultural regimes (e.g., fertilization, deer fencing, competition control), there are great opportunities to assess the marginal economic gains and make projections of long-term productivity gains from different cultural treatments, both alone and in conjunction. The successful candidate will be expected to develop a generalizable economic model, and then calibrate the model for several major hardwood tree species. Outputs from this work will include development of a web-based interfaces for private landowners on the economic returns for various cultural practices associated with plantation establishment, as well as several peer-reviewed journal articles.

Department assistantships are awarded at $23,420 (PhD) or $20,410 (MS) per year and include a subsidized insurance plan. The position will be based at Purdue University’s West Lafayette campus. Fieldwork, while not central to the project, may be required to check data integrity; therefore, the successful candidate will need travel to various locations throughout the Central Hardwood Region. In addition, the individual will occasionally be expected to assist others to collect field data in adverse environmental conditions typical of the Midwest.

Qualifications:
1. M.S. or B.S. in Forestry, Natural Resource Economics, or closely-related field 2. Minimum GPA of 3.2 3. GRE scores above the 50th percentile on verbal and quantitative sections and above 4.0 on the writing section 4. Strong data management skills and proficiency with database programs 5. Familiarity or proficiency with forest growth and yield models, such as FVS 6. Adequate statistical knowledge and familiarity with scientific programming languages such as R, Python, or Matlab 7. Strong oral and written communication skills 8. Demonstrated technical and scientific writing (i.e., management plans, reports or manuscripts) 9. Possess or obtain a valid driver’s license and have a good driving record

Interested individuals should contact Dr. Mike Saunders or Dr. Mo Zhou before submitting a formal application to Purdue’s Graduate School (http://www.purdue.edu/gradschool/). Application deadline is September 15, 2018 for a January 2019 start or January 15, 2019 for an August 2019 start.
Purdue University is an equal opportunity/equal access/affirmative action employer, fully committed to achieving a diverse workforce.