



POST-DOCTORAL FELLOWSHIP MODELING OF HUMAN AND NATURAL SYSTEMS

The University of Massachusetts-Amherst, Department of Natural Resources Conservation seeks to fill a two-year post-doctoral fellowship with the Family Forest Research Center (www.FamilyForestResearchCenter.org), a partnership between the University of Massachusetts and the U.S Forest Service dedicated to increasing our understanding of family forest owners and their roles in complex human and natural systems.

The Fellow will develop and apply quantitative, interdisciplinary models of relevant systems, processes, and interactions at multiple scales. She or he will have experience using one or several modeling approaches (e.g., forest landscape models, agent-based models, ecosystem process models), working with a variety of land use / land cover data, and making spatiotemporal estimates or future scenarios of landscape change. Projects will be conducted in collaboration with Drs. David Kittredge and Brett Butler and others working with the Research Center. Examples of potential research topics include (but are not limited to):

- Projecting forest ownership trends and behaviors at multiple spatial and temporal scales;
- Simulating future landscape condition in response to alternative policies and programs
- Assessing relationships between landowner decisions and land use/land cover
- Integrating quantitative social science data through agent-based modeling with other biophysical drivers of landscape change to estimate a set of future landscape conditions

Major data sources are expected to be the U.S. Forest Service's National Woodland Owner Survey (www.fia.fs.fed.us/nwos) and other Forest Inventory and Analysis data.

Qualified candidates must have a Ph.D. related to geospatial modeling, landscape ecology, natural resources, economics, statistics, or an allied field. Excellent analytical skills are a necessity. Exposure to family forestry issues is a plus, but not a necessity. Candidates should submit:

- Curriculum vitae,
- Contact information for three references,
- A research letter of intent (no more than three pages) describing two or more approaches to the above mentioned topics.

Materials should be submitted to:

Dr. Brett J. Butler
University of Massachusetts – Amherst
160 Holdsworth Way
Amherst, MA 01003
bbutler@nrc.umass.edu
Phone: 413-545-1387; Fax: 413-545-1860

Review of applications will begin on September 30, 2009 and the selected candidate will begin as soon as possible. The annual salary will be \$45,000 plus health and dental benefits. Applicants will be judged on the basis of their research record and the scientific quality of their research proposal. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.