

POST DOCTORAL FELLOW: Modeling Woody Plant Dynamics Across Diverse Landscapes of the Southern Great Plains

Department of Natural Resource Ecology and Management, Oklahoma State University, Stillwater, OK

PROJECT DESCRIPTION: Woody plant proliferation and management aimed at reducing woody plant abundance are widespread in North American Great Plains grasslands. These changes in woody plant abundance influences the provision on numerous ecosystem services and have substantial socio-economic impacts. Within this context, the Department of Natural Resource Ecology and Management at Oklahoma State University has Post-Doctoral funding from the National Science Foundation for an individual interested in developing the ecological component of a coupled human-natural systems project being conducted in Oklahoma and the southern Great Plains. The position will focus on modeling changes in woody plant abundance (primarily *Juniperus* spp.) in response to weather, climate, land use, and fire as constrained by soils. This individual will work with a team that includes landscape ecologists, hydrologists, and ecosystem, remote sensing and social scientists at Oklahoma State University, Texas A&M University, and the University of Arizona. An agent-based modeling framework will be used to link wildland vegetation change to social systems in the context of agriculture and energy development. The successful candidate is expected to generate peer-reviewed publications in prestigious scientific journals, to serve as co-principal investigator on future proposals, and to assist with development of a science-based ecological observatory.

REQUIREMENTS: Applicants should have a Ph.D. in ecology or related discipline, and demonstrated proficiency in dynamic vegetation modeling, statistics and database management including skills in R, Matlab, SAS or equivalent. An interest in linking ecological data to a socio-ecological framework is desired. The position will be based at Oklahoma State University in Stillwater, Oklahoma. Fluency in English and a valid driving license are required. Periodic field campaigns will require overnight travel and working conditions that could include extreme temperatures.

SALARY AND CONDITIONS: The position is open immediately. The start date is flexible, but is expected to be early in 2015. The duration of the position is 2 years with the possibility of a third year extension. Salary is commensurate with experience and skills. Natural Resource Ecology and Management at Oklahoma State University is a dynamic department with 20 faculty and a strong program of research, graduate education, and extension (<http://nrem.okstate.edu/>). The position offers abundant opportunity to interact across multiple universities with scientists working in diverse disciplines focused on socio-ecological systems.

APPLICATION/CONTACT INFORMATION: Applicants should send a cover letter, curriculum vitae, and contact information for three references in a single pdf-file to melissa.dunn@okstate.edu. The CV should contain a list of publications and information describing relevant skills and experience. Review of applications will begin immediately and continue until a suitable candidate is found.

FOR FURTHER INFORMATION, PLEASE CONTACT:

Dr. Sam Fuhlendorf; sam.fuhlendorf@okstate.edu

Applicants will be considered without discrimination for any non-merit reasons such as race, color, religion, gender, national origin, age, disability, or status as a Vietnam-era veteran.

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