Position – PhD Opportunity (Human Dimensions & Geospatial Analysis of Rangeland Ecosystems in the U.S. Southern Great Plains) – Virginia Tech, Department of Forest Resources and Environmental Conservation (Multiple Locations)

Project: The Virginia Tech Department of Forest Resources and Environmental Conservation is seeking a student to pursue a Ph.D. focusing on coupled human-nature systems in the Southern Great Plains of the United States (Texas/Oklahoma). The student will employ a geospatial approach to identify feedbacks between social change and ecological change. Specifically, the student will integrate demographic change, structural change (e.g., land fragmentation), with behavior (e.g., use of prescribed fire) to understand drivers of grassland-to-woodland conversion. The Ph.D. student will work as part of a highly integrated team of ecologists and social scientists.

Background: Rangelands make up over half of the land cover in the Southern Great Plains of the United States, and provide a number of ecological and economic services to rural communities including livestock production, water, and refugia for biodiversity. After centuries existing as grasslands these rangelands began transforming into woodlands in the early 20th century, primarily due to unregulated livestock grazing and active fire suppression. This transformation, known as woody plant encroachment, is 5 to 7 times greater in the Southern Great Plains compared to other regions of the country, and is currently advancing at an accelerated rate.

Qualifications: This project requires integration of social science theory with GIS and remote sensing. Candidates with an M.S. in a social science or conservation-related field, with strong quantitative skills, and who have experience working with geographic information systems are preferred. Candidates with an M.S. in a geospatial or ecological field are also welcome but must demonstrate a specific and committed interest in conducting social science research for their Ph.D.

Funding: The student will apply to and must be accepted by the Ph.D. degree program in Geospatial and Environmental Analysis at Virginia Tech and will train in the Department of Forest Resources & Environmental Conservation. Pending verification of funding, a full graduate research assistantship (with stipend) and tuition waiver will be provided for four years. The expected start date is August 2015.

If interested, please send a letter of interest and your CV to: **Dr. Michael G. Sorice**

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