From: Ajay Sharma <ajay.sharma@ufl.edu>
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Subject: Graduate Assistantship in Silviculture at University of Florida

Graduate Research Assistantship Announcement School of Forest Resources and Conservation, University of Florida, Gainesville, FL Joseph W. Jones Ecological Research Center, Newton, Georgia

A Master of Science graduate assistantship is available with Dr. Ajay Sharma in the School of Forest Resources and Conservation - University of Florida. The assistantship will be in collaboration with and supported by the Joseph W. Jones Ecological Research Center, under joint supervision of Dr. Seth Bigelow (forest ecologist) and Dr. Sharma.

## Project Description

"Community re-organization after windstorms in longleaf pine forests" The re-organization of forest communities after major canopy-opening disturbance depends on the presence and size of regenerating trees and their ability to quickly respond to increased resources. Disturbance regimes in frequent-fire longleaf pine ecosystems are thought to be characterized historically by single-tree or small group mortality due to lighting strikes, but larger openings due to hurricanes may have played a significant role in the development of these forests. Longleaf seedling and sapling growth may increase exponentially at larger opening sizes, yet competing hardwoods may benefit from the same resource pulse. This study will be conducted during the early stages of forest community re-organization after Hurricane Michael in two longleaf pine locations of varying severity of impacts along the storm's path: a moderate-to-severe impact area, and a light-to-moderate impact area. The objectives are to characterize the frequency distribution of canopy opening sizes created by the storm at each location; to measure height growth of regenerating longleaf pines and competing hardwoods across a gradient of light availability created by these openings; and to determine how soil conditions and time since fire interact with light to shape competitive outcomes. The resulting analysis will assist forest managers in identifying post-hurricane scenarios under which intervention may be required to achieve desired future conditions.

The graduate assistant is expected to spend first year at the University of Florida, Gainesville for completing course work, and the second year at the Joseph W. Jones Ecological Research Center at Ichauway, located near Newton, GA, for research work. Duties include satisfactory completion of coursework, field data collection and analyses, writing a thesis and peer-reviewed publication(s) related to the study. An ideal candidate for this position will have a B.S. degree in forestry or a closely related discipline, experience in field work, familiarity with longleaf pine ecosystems, proficiency in written and oral communication, strong GRE scores, and evidence of scholastic success. The position will begin in Fall (August) 2019.

The assistantship includes full tuition, competitive stipend, and fringe benefits. To apply, please submit the following to Dr. Ajay Sharma (ajay.sharma@ufl.edu) and/or Dr. Seth Bigelow (seth.bigelow@jonesctr.org).

- 1) statement of career goals
- 2) curriculum vitae
- 3) transcripts of course work
- 4) GRE scores
- 5) contact information for three references Review of applications will begin immediately and continue until a candidate is selected.