
MS Position Available to Study Disturbance Ecology of Longleaf Pine Forests

The College of Forest Resources at Mississippi State University and the Landscape Ecology Lab at the Jones Center at Ichauway are seeking applicants for a M.S. assistantship to investigate the effects of hurricane Michael on longleaf forest ecosystems in Georgia using airborne and terrestrial LiDAR. The position is available starting fall semester 2021. Funding is provided for two years, and consists of a competitive stipend plus six semesters of in-state tuition.

The selected student will analyze data collected through airborne and/or terrestrial LiDAR to assess hurricane impacts on structural complexity in a longleaf pine forest. The ultimate objectives of the study are to provide new knowledge regarding natural disturbance impacts and inform conservation and management of a critically endangered ecosystem. The research will combine LiDAR collection, processing, and analysis, and may include collection of field data using terrestrial LiDAR and traditional surveys. While the applicant would be an M.S. student at Mississippi State University, the work would be co-sponsored by the Jones Center at Ichauway, and the field work would take place in southwestern Georgia at the Jones Center, a privately-funded 28,500-acre research facility and preserve in Newton, Georgia.

The successful applicant will be expected to spend time in residence at the Jones Center for field data collection and where housing may be provided, and remaining portions of the academic year on the MSU campus while completing coursework. The M.S. degree will be co-advised by Dr. Qin (Christine) Ma in the School of Forestry at MSU (<https://forestsensing.com/lab-members/>) and Dr. Jeffery Cannon at the Jones Center at Ichauway (<https://www.jonesctr.org/lab-forest-landscape-ecology-cannon/>). Successful applicants will have strong quantitative, analytical, and writing skills and be able to organize, manage, and analyze large datasets. Applicants with undergraduate research experience or analytical experience in quantitative biology, computer science, forest ecology, geography, remote sensing, or a closely related discipline are preferred. The project will involve analysis of large spatial data, thus research, work, or classroom experience with some or all of the following is preferred: (1) GIS data management and workflows, (2) computer programming or data analysis, (3) experience with ArcGIS, Google Earth Engine, R, Python or MATLAB.

To apply, submit a CV, transcripts, GRE scores, contact information for three references, writing sample, and letter of interest via e-mail to: Jeffery Cannon, Forest Management Scientist, Jones Center at Ichauway (Jeffery.cannon@jonesctr.org). Applications received by March 24, 2021 will receive full consideration. Candidates must also apply to the Mississippi State University graduate school and must meet all requirements of the Graduate School. See <https://www.grad.msstate.edu/students/admissions> for details.