



School of Natural Resources University of Missouri

Graduate Research Assistantship

Center for Tree-Ring Science, School of Natural Resources University of Missouri, USA

White oak regeneration ecology using quantitative wood anatomy and dendrochronology

A Master of Science graduate research assistantship is available with Drs. Michael Stambaugh and Benjamin Knapp at the Center for Tree-Ring Science (http://www.treerings.missouri.edu), School of Natural Resources (http://www.snr.missouri.edu/forestry/), University of Missouri, USA. This assistantship is supported by the Missouri Department of Conservation and this research aims to improve uneven-aged forest management focused on enhancing white oak regeneration. In recent decades, white oak regeneration has been declining in forests across the eastern U.S. In recent years, multiple regional efforts have been initiated to understand its ecology and management. Uneven-aged forest management is a commonly utilized forest management system and its effectiveness is a central focus of this project.

This project will investigate tree rings of oaks in the regeneration stage. The student will investigate ages and growth rates of roots and shoots using quantitative wood anatomy and standard dendrochronological techniques. With known forest management timing and intensity, the student will investigate the effects of treatments on tree establishment and growth.

Duties of this position will include completion of required coursework, field sampling, laboratory analysis, data and analysis, and completion of a thesis and peer-reviewed publication(s). Competitive candidates for this position will have a B.S. degree in forestry, ecology, biology, natural resources, or a closely related discipline, prior experience in dendrochronology, proficiency in written and oral communication, and evidence of scholastic success. The position will begin in January of 2023.

The successful candidate will receive tuition support, a competitive stipend (\$25,800 per year), and student medical insurance. To apply, please submit the following to Dr. Michael Stambaugh (stambaughm@missouri.edu):

- 1) personal statement of career goals
- 2) resume or curriculum vitae
- 3) transcripts
- 4) contact information for three references

Review of applications will begin immediately and continue until a candidate is selected. Come join us at the University of Missouri - Center for Tree-Ring Science!