



DEPARTMENT OF  
**NATURAL RESOURCE  
ECOLOGY AND MANAGEMENT**

**OKLAHOMA STATE UNIVERSITY**

Division of Agricultural Sciences and Natural Resources  
Natural Resource Ecology and Management  
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Ph.D. Research Assistantship in Applied Forest Ecology and Digital Forestry at the Department of Natural Resource Ecology and Management, Oklahoma State University, Stillwater

We are looking for a highly motivated Ph.D. student to join Dr. Lu Zhai's group. Our current projects focus on: (1) **Forest carbon storage and productivity**; (2) **Species invasion**; and (3) **Forest microclimate and wildfire**, using forest inventory data, remote sensing imagery, and field-based measurements including LiDAR, drone, and other advanced tools.

**Recent publications from student-led projects of our lab:**

- Hwang, K. et al. Structural diversity shifts from negative to positive associations with forest productivity via basal area, stand age, and precipitation thresholds. *J. Ecol.*, Accepted
- Hanby, G., et al. 2025. Drought impact on tree productivity: Varying roles of tree size and structural diversity in 18 woody species along gradients of slow-fast growth strategies. *Agric. For. Meteorol.*, 369: 110592
- Murray, S., et al. 2025. Structural diversity is an important predictor of forest productivity responses to drought. *J. Appl. Ecol.*, 62(4): 911-920
- Nixon, B., et al. 2025. Stronger tree size-mortality association with increasing droughts and basal areas: A meta-analysis. *Ecol. Indic.*, 172: 113326
- Zhai, L., et al. 2024. Drought Impacts on the Efficacy of Invasive Grass Control by Clipping: A Study on Johnsongrass (*Sorghum halepense*). *Biol. Conserv.*, 296: 110724

**Application details:**

1. A graduate stipend of **\$26,000 per year with annual increase based on research performance**, resident and non-resident tuition waiver, and health insurance at \$25 per month (for student only; family coverage is available for an additional fee).
2. Starting Date: **2026 June or August**
3. Application date: Review of applications will begin on **Jan 1, 2026**. Applications will be accepted until the position is filled, but applications received by the date will receive full consideration. Email inquiries ([lu.zhai@okstate.edu](mailto:lu.zhai@okstate.edu)) about the status of the position are welcome.
4. Qualifications: Applicants should have: (1) **B.S. or M.S.** in natural resources, ecology, GIS, remote sensing, or a related field; (2) An undergraduate GPA of 3.0 or higher. Desired qualifications include: (1) Experience or coursework in statistical or geospatial analysis; (2) Interests in plant ecology.
5. Documents: Applicants must create **a single PDF** with the name containing the first and last name of the applicant. Send the PDF to Dr. Lu Zhai ([lu.zhai@okstate.edu](mailto:lu.zhai@okstate.edu)). The PDF must contain: (1) A 1 or 2-page letter of interest stating motivation to pursue an Ph.D. degree and research experiences and interests; (2) Curriculum Vitae including GPA, GRE, and TOEFL/IELTS scores (international students only). **Note that GRE could be waived with peer-reviewed journal publication in English or other significant research outcomes**; (3) Three references: names, emails, and connection with references (i.e., if you participated in a specific project with one reference, please

add the project title or topic and a brief description in 2 or 3 sentences), (4) Unofficial college transcript and GRE transcript.

6. Institutional Information: Oklahoma State University (OSU) is located in Stillwater, Oklahoma, which is within an hour of both Tulsa and Oklahoma City. Oklahoma State University is classified as R1: Doctoral University, with very high research activity in the Carnegie Classification of Institutions of Higher Education. OSU is a land-grant institution with an enrollment of ~25,000 students. The Department of Natural Resource Ecology and Management is part of the Division of Agricultural Sciences and Natural Resources and conducts interdisciplinary research, instruction, and extension education to address the sustainable management and conservation of the wildlife, forest, rangeland, and fishery resources of Oklahoma and beyond. The Department is a source of cutting-edge research, quality instruction, and effective outreach to students, landowners, managers, and public agencies.
7. OSU is located on the ancestral lands of the Kickapoo, Osage, Kiowa, and Quapaw peoples. Indigenous people from other Native nations also reside here, many of whom were forcibly removed from their ancestral lands. They all contribute to the history and current vitality of our region.
8. Any offer of employment is contingent on the university's verification of credentials and other information required by law and/or university policies, including but not limited to a criminal background check. Oklahoma State University, as an equal opportunity employer, complies with all applicable federal and state laws regarding non-discrimination and affirmative action. Oklahoma State University is committed to a policy of equal opportunity for all individuals and does not discriminate based on race, religion, age, sex, color, national origin, marital status, sexual orientation, gender identity/expression, disability, or veteran status with regard to employment, educational programs and activities, and/or admissions.