

PhD Graduate Teaching Assistantship – Fire Ecology



Northern Arizona University School of Forestry seeks to fill one PhD position funded through a Teaching Assistantship. This position will focus on spatial patterns of wildfire disturbance related to forest dynamics, post-fire recovery, and biodiversity conservation in the Jemez Mountains of New Mexico. The PhD student will participate in and conduct investigations to quantify impacts of fire severity, fire frequency (e.g., short interval repeat fires), time since fire, and patch size and isolation on forest structure, composition, and regeneration dynamics. Applicants should possess strong analytical skills, applied knowledge of remote sensing and spatial analysis, working knowledge of statistical and ecosystem models, and ability to work with and manage large spatial databases.

The position will be supervised by Dr. Andrea Thode (andi.thode@nau.edu) and Dr. Rachel Loehman (rloehman@usgs.gov).

The position start date is Fall 2021. The recipient of this position will work 20 hours a week as teaching assistant, and will receive an annual stipend, university health insurance, and a tuition waiver. Funding is available until the completion of the degree.

Required qualifications

- All of the requirements for admission to the NAU School of Forestry PhD program
- A research-based MS degree in forestry, ecology, natural resources, biology, or a related field
- Strong analytical and quantitative skills; ability to implement complex, applied statistical analyses in R
- A genuine interest in and experience relevant to fire and forest ecology
- Experience acquiring and managing large datasets, including metadata documentation
- Experience with field sampling, including logistics and off-trail navigation
- Experience with GIS and geospatial software, data, and analytical methods
- Ability to work independently and to manage multiple responsibilities and deadlines

- Excellent written and oral communication, ability to prepare manuscripts for publication in peer-reviewed journals and share results through webinars, conference talks, and fact sheets

Preferred Qualifications

- Experience working with spatial data sets in Google Earth Engine
- Experience as a college-level teaching assistant in forestry, ecological, biological, or environmental sciences or natural resources management
- Strong self-motivation, determination and ability to work in unstructured environments

How to apply

Please send the following documents to Dr. Andrea Thode email (andi.thode@nau.edu) and Dr. Rachel Loehman (rloehman@usgs.gov) by January 22, 2021 (applications will be reviewed on a rolling basis following that date):

- A one-page cover letter clearly stating experience, qualifications, and research interests
- A current CV describing your education and experience relevant to the position
- A recent writing sample (e.g., peer reviewed publication, thesis, etc.)
- Contact details for three references (including at least one academic reference)

Additional materials may be requested later in the process. Please note that the successful applicant must be based on the Flagstaff campus for the duration of the degree. Requests to study remotely will not be considered (excepting COVID issues).

About Northern Arizona University

Northern Arizona University is a 29,000 student-institution with its main campus in Flagstaff, a city of about 70,000 at the base of the San Francisco Peaks. Flagstaff is known for its year-round recreation opportunities, including skiing, hiking, and rock climbing, as well as its proximity to the Grand Canyon, four national forests, and numerous state parks and wilderness areas. More information about NAU's graduate programs in Forestry, including eligibility requirements, can be found at <https://nau.edu/forestry/degrees-and-programs/phd-forest-science/>. Our graduate student handbook can be found at: <https://nau.edu/forestry/internal-resources/graduate-student-handbook/>.

