The USDA Forest Service’s Pacific Southwest Research Station (PSW) is seeking a Postdoctoral/Post-graduate Fellow with experience in fire ecology/fire science and/or forest ecology to join a team of scientists investigating ecological outcomes of different forest management treatments including mechanical thinning, reforestation, and prescribed fire. Several research topics the Fellow will have the greatest involvement with include: 1) evaluating the ecological outcomes of different post-high severity fire reforestation options, 2) performance of prescribed fire treatments in young stands to understand tree age, burn timing, and ignition strategies that best meet management objectives, and 3) evaluating how forest management treatments influenced fire behavior and effects in wildfires. Opportunities may also exist to evaluate the ecological outcomes of indigenous fire regimes and effects of fire on culturally important species. Besides these topics, the Fellow will have opportunities to participate in new field experiments, design and carry out studies of their own, and may assist in grant writing.

**Learning Objectives:**

- To better understand how management can be modified to improve long-term reforestation success, leading to diverse forests that are both resilient to disturbance and have high habitat value.
- To enhance collaborative skills as a member of a scientific team by helping to formulate research questions that meet needs of resource and fire managers, plan data collection and analysis, and identify other potential questions for which existing long-term
experimental data can be used

- To gain experience analyzing tree seedling and mature tree inventory data, organizing project data and metadata for use in current and future research, and translating quantitative scientific results into products that enhance forest and fire management capabilities
- To extend natural resource information-sharing capabilities by collaborating on the preparation of manuscripts for publication in peer-reviewed journals and communicating study results to scientists and forest managers via meetings, presentations, webinars, and field tours

**Mentor:** The mentor for this opportunity is Eric Knapp (eric.e.knapp@usda.gov). If you have questions about the nature of the research please contact the mentor.

**Anticipated Appointment Start Date:** March 2022. Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for one year, but may be extended an additional year upon recommendation of USFS and is contingent on the availability of funds.

**Level of Participation:** The appointment is full-time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience.

**Citizenship Requirements:** This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR) only.

**ORISE Information:** This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and USFS. Participants do not become employees of USDA, USFS, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

**Questions:** Please visit our Program Website. After reading, if you have additional questions about the application process please email USForestService@orise.orau.gov and include the reference code for this opportunity.

**Qualifications**

The qualified candidate should have received a master's or doctoral degree in one of the relevant fields, or be currently pursuing one of the degrees with completion by the start of their appointment. Applicants in the latter stages of completing a degree might also be considered in some circumstances.

**Preferred skills:**

- Demonstrated experience in data management and statistical analysis of ecological datasets
- Evidence of scientific and technical writing for peer-reviewed publication
- Experience presenting on natural resource topics to both scientific and general/manager audiences
- Demonstrated understanding of forest ecology and/or fire ecology and/or forestry at scales ranging from treatments to landscapes
- Experience conducting ecological field research in forested ecosystems
- Some background or training in fire management, including basic NWCG (National Wildfire Coordinating Group) firefighter training (S-130, Firefighter Training and S-190, Introduction to Wildland Fire Behavior) a plus, but not necessary
- Capacity to perform both independently and as part of a team
- Ability to prioritize multiple projects and activities within project deadlines
- Interest in science applied to management questions

**Eligibility Requirements**

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Master's Degree or Doctoral Degree.
- **Discipline(s):**
  - Environmental and Marine Sciences (6)
  - Life Health and Medical Sciences (5)
Opportunity Title: USFS Fellowship in Applied Fire and Forest Ecology

- Social and Behavioral Sciences (2 ☛)