

# FOREST, RANGELAND, AND FIRE SCIENCE (PH.D.)

## Doctor of Philosophy. Major in Natural Resources.

Candidates must fulfill the requirements of the College of Graduate Studies and of the College of Natural Resources. Graduate programs are offered in many forest and rangeland specialization areas including the following:

- Ecology and Biogeosciences of Forest and Rangeland Ecosystems: ecosystem processes/modeling, biometrics, biogeochemistry, hydrology and ecohydrology, remote sensing and geospatial ecology, landscape ecology, community ecology, population ecology, ecosystem ecology, disturbance ecology, paleoecology, restoration ecology, ecophysiology, global environmental change, conservation biology/genetics, and molecular plant systematic;
- Forest Sciences and Management: forest mensuration, forest regeneration, forest ecosystem management, tree physiology, forest pathology, forest policy, forest operations, silviculture, forest ecology, and forest genetics;
- Fire Sciences and Management: fire effects and recovery, fire behavior, fuels management, biophysical controls of fire and fire regimes, air quality and smoke management, fire history, and fire ecology; and
- Rangeland Sciences and Management: grazing behavior and management, invasive plant management, livestock-wildlife relations, rangeland and habitat management, rangeland riparian management, and rangeland ecology.

Admission to the graduate program is based on evidence of ability to complete graduate-level work as discerned from undergraduate transcripts, the applicant's statement of career objectives, and letters of recommendation; the compatibility of the student's educational and career objectives with faculty expertise and departmental objectives; and availability of graduate faculty to act as major advisor for an applicant. An undergraduate degree related to our programs is also recommended, but an applicant may be accepted with the understanding that certain course deficiencies may be required by the student's advisory committee.

Students can transfer up to 12 approved credits taken as a non-degree seeking student into a M.S. or Ph.D. program in the College of Natural Resources with permission of the departmental graduate committee. Students who are considering transferring non-degree credits into a CNR graduate program should request early advising from the appropriate department.

Please see the College of Natural Resources graduate handbook (<https://www.uidaho.edu/-/media/UIDaho-Responsive/Files/cnr/grad-programs/cnr-grad-student-and-faculty-advisor-handbook.pdf?la=en&hash=0278D84660B4A60E266E591BB5F18A7DBA2A9E1F>) for details and program requirements on earning the PhD in Forest, Rangeland, and Fire Science degree.

1. Conduct innovative and high-quality research in natural resources by:

a) Demonstrating advanced and independent mastery and understanding of the scientific method and how it applies to disciplinary knowledge and principles;

b) Identifying knowledge gaps and/or management or social challenges, designing and proposing a research project with an original problem statement, analyzing data, and interpreting results;

c) Demonstrating original thought and insights to advance their discipline.

2. Effectively communicate both orally and in written format, including in peer-reviewed contexts and to a diversity of audiences.

3. Exhibit practices and behaviors conducive to developing a career in natural resource science and/or management.