

Subject: PhD position in wildlife-fire-range ecology

Ph.D. Graduate student opportunity

Recovery of mule deer habitat and post-fire resource selection in juniper-invaded sagebrush- bitterbrush ecosystems

Position Summary

The overarching objective of this study is to quantify the responses of mule deer to multiple restoration management scenarios following stand-replacing wildfire in the Phillip W. Schneider Wildlife Management Area (PWSWMA) and the surrounding region. The PWSWMA was historically renowned as a critical wintering area for mule deer. Past overgrazing, expansion of western juniper, loss of understory, and invasion by multiple non-native annual grasses have contributed to significant declines in habitat quality and site occupancy by native wildlife species. We will test how management alternatives pre-fire (pre-fire juniper status, juniper cutting, grazing history) and post-fire (herbicide, herbaceous and woody seeding) impact ecosystem recovery and wildlife utilization following disturbance. These answers are critical to managers as they seek to restore and maintain Oregon's shrub steppe wildlife habitats.

We seek a highly motivated doctoral researcher to work with us on this exciting restoration ecology and resource selection project. At a minimum, the graduate student will have the opportunity to explore 1) spatial and resource selection responses by >100 GPS-collared mule deer responses and 2) small mammal community composition and relative abundance in cut and uncut juniper. We would expect the doctoral student to develop one or more additional investigations according to their interests. Project datasets, including pre- and post-fire vegetation data, will be available for incorporation in analyses. A minimum of two years of fieldwork (spring-summer, possibly some fall work) will be expected. The graduate researcher will complete a Ph.D. in Wildlife Science under co-supervision by Dr. Dana Sanchez (wildlife biology and rangeland ecology) and Dr. Lisa Ellsworth (fire science and rangeland habitat ecology).

Fieldwork on the study area involves rugged travel via large trucks with trailers, ATV and hiking. Daily conditions can be challenging, including variations of weather, fire conditions, encounters with venomous reptiles and semi-primitive living conditions at base camp. This researcher must be a self-starter whose experience and maturity will enable them to carry out high-quality data collection whilst paying utmost attention to issues of human safety. The doctoral student will be responsible for training and supervising field technicians. The student would be based at Oregon State University in Corvallis, OR for their coursework. Stipend/Salary and benefits: \$1900/month plus subsidized medical benefits and a waiver of tuition (resident tuition fees still apply). Stipend support will consist of research assistantships and (online) teaching assistantships.

Applicants must have a M.S. degree in wildlife or rangeland ecology or a closely related discipline. Preference will be given to those who have 1) field experience in sagebrush shrub steppe ecosystems, 2) experience in handling and identifying small mammals, 3) working with remotely sensed or geospatial data sets, and/or 4) using habitat selection analysis tools. Applicants' letters should specifically address how their skills and experiences match the demands of this project. Also summarize your field experience in shrub steppe ecosystems, any teaching experience you have gained, your experience in analyzing large spatial datasets and running resource selection models, as well as your long-term career goals and research interests. Application packages will include: 1) the letter described above, 2) a current resume/CV which includes GPA, GRE, and demonstration of field experience, 3) current contact information for 3-6 professional references, and 4) unofficial transcripts. Submit your complete application as a single PDF document named with the following

format: Lastname_Firstname. Please contact Drs. Sanchez and Ellsworth with any questions: Dana.Sanchez@oregonstate.edu and Lisa.Ellsworth@oregonstate.edu

Applications should be e-mailed to: Dr. Dana Sanchez
Dana.Sanchez@Oregonstate.edu

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"May your trails be crooked, winding, lonesome, dangerous, leading to the most amazing view. May your mountains rise into and above the clouds."

Edward Abbey (1927 - 1989)