**Post doc examining fuel treatment effects and grazing exclusion in sagebrush ecosystems, USDA-ARS, Reno, NV**

We seek a postdoctoral researcher to investigate the effects of grazing in relation to fuel reduction treatments in sagebrush ecosystems. The Sagebrush Steppe Treatment Evaluation Project (SageSTEP; [sagestep.org](http://www.sagestep.org/)) is a long-term fuel treatment experiment where herbicide, mechanical, and prescribed fire treatments were implemented ~18 years ago at 19 sites across the Intermountain West in either sagebrush or pinyon-juniper (PJ) plant communities. This long-term network is an impressive data resource with soil, vegetation, and climate measurements from 2006 to present. First, we will evaluate the effects of various fuel treatments on annual/perennial grass dynamics and forage production across soil and climatic gradients over the past 18 years. Second, most plots are fenced on grazed lands, allowing us to make grazed and ungrazed comparisons. The candidate will analyze data from 2006-2014 to investigate differences in plant communities between grazed and ungrazed areas, and opportunities exist to collect current data outside exclosures next spring, including adding soil measurements. This long-term data set also allows for examining invasion dynamics in the context of climate change over the past two decades. Additionally, SageSTEP is a highly collaborative project allowing for collaborations across interdisciplinary datasets.

Primary duties include analyzing existing data sets, as well as writing manuscripts. Pending additional funding, the candidate may also lead efforts collecting new data in relation to both plant communities and soils inside and outside exclosures. The candidate will work in interdisciplinary teams across federal agencies and universities to answer land management research questions.

*Qualification Requirements*: Ph.D. in biology, ecology, or other natural resource-related disciplines. The position requires advanced statistical skills to evaluate large data sets, as well as demonstrated scholarship from first-authored publications and presentations. The candidate should be proficient in plant ecology. Knowledge about soils, fire ecology, restoration, climate change, desert ecology, as well as geospatial data sets and machine learning, is desired. *The* *candidate must be a US citizen.*

Application reviews will start on November 20, 2024, until the position is filled. A Spring 2025 start date is preferred before the field season. Salary is $65,000/yr currently with 2.5 years of funding. To apply, please send a cover letter, CV, and contact information for three references to Dr. Beth Newingham at [beth.newingham@usda.gov](file:///Users/Beth.Nnewingham/My%20Drive/ARS/Administration/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/1CY9O58C/beth.newingham@usda.gov). More information about the lab can be found at <http://newinghamlab.weebly.com>. Please contact Dr. Newingham with any questions. The USDA Agricultural Research Service is an equal opportunity provider and employer.