

## **PhD Assistantship Opportunity in Rangeland Ecology and Conservation of Greater Sage-grouse.**

An Interdisciplinary team at Colorado State University (CSU) is looking for a motivated PhD Candidate with strong interests in the field of ecology and quantitative modeling to participate in a larger research project focused on the development of State and Transition Models (STMs) in rangeland systems that incorporate sage-grouse as a response variable within an adaptive management framework. The research team is a mix of academic faculty at CSU and University of Wyoming, extension specialists, and local rangeland specialists from state and federal agencies in Colorado and Wyoming. Researchers will work with ranchers and rangeland specialists across multiple different pilot sites, building on existing efforts to increase landowners' awareness and knowledge of STMs through collaborative monitoring, modeling workshops, and adaptive ranch management plans developed using monitoring data and STMs. Adaptive management of ranches with monitoring before and after implementation will be used to design a suite of decision tools and simulation games to help ranchers understand and manage for specific desired outcomes, whether it be one or more outcome focused on various aspects, including vegetation productivity, livestock production, or various ecosystem services such as wildlife habitat and conservation. The selected PhD Candidate will work with the research team to design and collect monitoring data, and specifically inform and model wildlife responses to various management alternatives, focusing on sage-grouse habitat requirements across life stages and spatial scales, and potential effects on population demographics.

### Required Qualifications:

- MS in Ecology, Wildlife Conservation, Rangeland Ecology, or a related field
- Excellent written and oral communication skills
- Excellent organizational skills
- Ability to work independently
- Ability, enthusiasm and experience working with diverse stakeholders including landowners, agency staff, conservationists, students etc.

### Desired Qualifications:

- Experiences or understanding of issues related to conservation of sage-grouse and/or other wildlife within shrub-steppe or rangeland systems
- Knowledge of ecological site descriptions and state and transition models
- Strong quantitative analysis skills including multivariate models, generalize linear models, spatial modeling, inferential and Bayesian statistics using current statistical software programs (e.g. R+, SAS, STATA, Jump, SPSS or similar)
- Experience with spatial analyses and GIS and/or remote sensing

Colorado State University (<http://admissions.colostate.edu/>) has prolific research in natural resources (<http://warnercnr.colostate.edu/>) and a world class Graduate Degree Program in Ecology (<http://ecology.colostate.edu/>). CSU is located in beautiful Fort Collins, on the foothills of the Rocky Mountains, and has been voted as one of the best places in the United States to live.

Compensation: Stipend of ~\$23,000 plus Tuition

Individuals interesting in applying for this position should contact Dr. Cameron Aldridge ([cameron.aldridge@colostate.edu](mailto:cameron.aldridge@colostate.edu)). Please send 1) a cover letter explaining your long-term career/research goals and academic interests, 2) a copy of your current CV (resume), 3) GRE scores and unofficial transcripts, 4) names, addresses, and e-mail contacts for three references. Applications will be evaluated upon receipt.