Project Description:

Background Information:
Increases in wildfire and associated exotic plant invasions have reduced the once-vast domain of sagebrush by ~50%, and efforts to reduce the losses and restore impacted areas have become the largest conservation program in the USA. Successful restoration is vital to sustaining species such as the Greater Sage-Grouse, which has been considered for ESA listing. However, the success rate of treatments has been mixed, and it has become clear that learning from restoration successes and failures is needed. The 2015 Soda Megafire burned nearly 300,000 acres of sagebrush steppe habitat, and became the first fire response to adopt an adaptive management approach to applying restoration treatments. The project is moving into its 4th year, with sampling of >2000 plots across a rugged montane landscape, with very close interaction between USGS scientists leading the monitoring and research and land managers. There are many subprojects and questions being addressed, and they all revolve around 1) creating resistant and resilient landscapes that will not need continued restoration intervention after future fires or invasion threats, and 2) preserving or increasing diversity.

Objectives:
Determine the effectiveness of post-fire herbicide and seeding treatments on vegetation recovery and wildlife utilization of a large burned landscape

Intern Tasks:
Field data collection

Expected Outcomes:
Students will learn about the dynamic nature of post-fire recovery and adaptive management, and will do so in a team setting where they will learn to work with one another in the field, using state-of-the-art sampling technologies.
Type of Project: Field Work

Project Discipline: Ecology

Project Start Date: Mon Apr 22 2019 00:00:00 GMT-0400 (EDT)

Project Duration: 5 months

Level of Physical Demand: Level 8-2: The work requires some physical exertion such as long periods of standing, walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; or recurring lifting of moderately heavy items. The work may require specific, but common, physical characteristics and abilities such as above-average agility and dexterity.

GIS Training: ESA

Special Skills and Interests: plant taxonomy, field data collection