



2019 Cooperative Summer Field Training Program

● Project Title:	Drought experiments on the Colorado Plateau
● Project Scientists:	Mike Duniway & Jayne Belnap
● USGS Center:	Southwest Biological Science Center, GGCMZD0000
● Location:	Canyonlands National Park

Project Description:

Background Information:

Increasing aridity in western U.S. drylands under future climates will exacerbate risks associated with drought and land use decisions. This project is providing critical observational, experimental, and modelling evidence to support our DOI partners with decision processes aimed at avoiding, minimizing, and mitigating undesired changes due to drought and land change.

Objectives:

The incumbent will have the opportunity to work on a number of ecological research projects, working closely with USGS scientists, local resource management staff (primarily BLM), and experienced technicians. This approach will expose the student to a variety of research approaches, methods employed, and types of ecological investigations pursued by USGS research scientists. In addition, the intern will be exposed to the type of management-relevant research critical to the USGS mission. Primarily, the intern will have an opportunity to work on include evaluating the effects of rainfall reduction on plant physiology (funded by USGS), the effects of variable precipitation on native grasses (funded by BLM), and evaluating the environmental consequences of cattle grazing on soils.

Intern Tasks:

Field measurements of plant and soil cover, seedling counts, soil and plant sampling, laboratory analysis, and data entry.

Expected Outcomes:

Interns will work closely with SBSC post-doctoral scientists, research ecologists, and skilled biological technicians in all aspects of their internship. We will provide an orientation session that includes background on the larger scientific questions being addressed by the research projects as well as opportunities to attend presentations given by visiting scientists and resource managers. We will also work closely with interns to assure they obtain desired work experience to the degree achievable within the confines of the research projects and their abilities.

Details for Matching:

Type of Project: Field Work

Project Discipline: Ecology, Climate Science

Project Start Date: Wed Apr 17 2019 00:00:00 GMT-0400 (EDT)

Project Duration: 3 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 identification, ecology, soils, and interest in working outside as part of a team.