

## Project Summary

### Rocky Mountains Cooperative Ecosystem Studies Unit

**Project Title:** Promote Preservation of Resources through Monitoring at Grant-Kohrs Ranch NHS

**Discipline:** Natural  
**Type of Project:** Technical Assistance/Education  
**Funding Agency:** National Park Service  
**Cooperators:** Montana State University  
**Effective Dates:** 3/1/2012 - 12/31/2015  
**Funding Amount:** \$51,420 [FY14: \$23,784; FY13: \$9,403; FY12: \$18,233]

**Investigator and Agency Representatives:**

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**Project Abstract:** The Grant-Kohrs Ranch National Historic Site is the unit of the National Park Service created to specifically preserve and tell the story of frontier cattle ranching and its evolution into modern times. It is a working ranch with cattle, horses, irrigation systems and hayfields guided by the natural resource management program. This project will provide essential staff support to monitor natural resources and provide data that is meaningful and critical to facilitate resource stewardship.

This project, through the work of student interns, will evaluate natural resource condition through monitoring and survey protocols. Monitoring standards and protocols will be provided by resource staff. The Interns will receive orientation to the history and purpose of the National Park Service and the Grant-Kohrs Ranch to understand how their work contributes to the organizational missions.

The student interns will be asked to accomplish the following tasks as part of a team, and as time allows:

- Utilize NRCS Web Soil Survey to develop soil and vegetation data set for each fenced pasture/hayfield.
- Assist with identifying key species and key areas and complete a forage inventory for each pasture
- Compare NRCS data with forage inventory and update estimated Animal Unit Months (AUMs) table by pasture/hayfield.
- Complete Riparian Health Assessment for small streams.
- Determine age classes of key plant species in upland pastures.
- Implement soil testing for hay fields.
- Complete multiple invasive plant surveys.
- Assist Inventory and Monitoring staff in completing vegetation, soil, and water quality sampling.
- Complete Columbian ground squirrel and beaver surveys.
- Assist with irrigation water flow measurements and developing flow rating.
- Assist with livestock care and health checks.
- Photograph, record sounds and create presentation of birds at GRKO; and
- Assist with historic ranch work and interpretive events

**Outcomes with Completion Dates:** Final reports submitted in December of 2013-2014

**Keywords:** natural resource conditions, monitoring and survey protocols, student interns, Grant-Kohrs Ranch NHS, Montana State University,