

# **Project Completion Report**

## **Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)**

**Project Title:** FY13 Promote Preservation of Resources through Monitoring at Grant-Kohrs Ranch NHS – Year 2

**Project Code:** P13AC00107 MSU-252

**Type of Project:** Technical Assistance/Education

**Funding Agency:** National Park Service

**Partner University:** Montana State University

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**Start Date of Project:** March 1, 2013 with modification to April 30, 2013

**End Date of Project:** September 30, 2014

**Funding Amount:** \$9561 with additional modification \$9,403 for total of \$18,964

**Project Summary, including descriptions of project deliverables, work accomplished and/or major results. If the information is restricted (e.g. location of endangered species or cultural resources), indicate the title and location of the final report. Also add web sites where project-related information may be found.**

A RM-CESU agreement was initiated with Montana State University (MSU) and a professor of Range Ecology, as the Principal Investigator to provide two interns to monitor natural resources. The Youth in Parks (YIP) program at Grant-Kohrs Ranch NHS (GRKO) was successful in Year Two (2013) and met the program's objectives of promoting a conservation ethic in young interns and using their monitoring work to direct preservation of resources. The YIP program at GRKO also achieved the National Park Service *Centennial Call to Action, Item 2, Step by Step*, specifically by creating a deep connection between two young interns and GRKO through a series of diverse experiences.

The interns received orientation to the history and purpose of the National Park Service and GRKO to understand how their work would contribute to the organizational missions. On site mentoring and work plan direction for the project was provided by GRKO Natural Resource Specialist. Monitoring standards and protocols were provided/taught by GRKO resource,

Montana State University, NPS Inventory & Monitoring, and University of Montana Avian Science Center Staff.

The student interns accomplished the following tasks during their June through August season:

1. Completed GPS mapping of invasive plants on more than 1300 acres
2. Created a wildlife survey system using game cameras and created a PowerPoint presentation of wildlife at GRKO;
3. Assisted interpretive staff with developing a visitor program presentation on native and introduced grasses;
4. Completed a 2013 forage inventory for each pasture and updated estimated Animal Unit Months (AUMs) table by pasture/hayfield;
5. Developed a photopoint monitoring system that tracked change in vegetation biweekly and created a PowerPoint presentation showcasing the change;
6. Completed Riparian Health Assessments for four small streams;
7. Assisted NPS Inventory and Monitoring staff in completing vegetation, soil, and water quality sampling;
8. Assisted CERCLA project manager with seedling establishment and native plant seed collection;
9. Completed Columbian ground squirrel and beaver surveys;
10. Recorded irrigation water flow measurements;
11. Completed soil testing for all hayfields; and
12. Assisted with historic ranch work, effluent sprinkler irrigation and interpretive events.

Training opportunities included GRKO All Staff Safety Day, GRKO Teacher's Workshop, Montana Avian Science Center monitoring, NPS ROMN I&M vegetation and soil monitoring, and NPS ROMN I&M water quality sampling.

The valuable data collected through the two intern's efforts is being used to teach and facilitate resource stewardship.

**Number of students participating in this project: undergraduates, graduate students, degrees conferred.** The two MSU interns selected were a fourth year Rangeland Ecology major and a third year Natural Resources and Rangeland Ecology major.