Project Completion Report Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU)

Project Title: Research Fencing to Protect Resources at Grant-Kohrs Ranch NHS

Project Code (such as UMT-72 and/or the "J" number): MSU-215

Type of Project (Research, Technical Assistance or Education): Research

Funding Agency: National Park Service

Partner University: Montana State University

NPS Agreement Technical Representative (with complete contact information):

Christine Ford
Integrated Resources Program Manager
Grant-Kohrs Ranch NHS
266 Warren Lane
Deer Lodge, MT 59722
406-846-2070 x242
406-846-3962 fax

email: chris_ford@nps.gov

Principal Investigators (with complete contact information):

Dr. Lisa Rew Montana State University P.O. Box 173780 Bozeman, MT 59717 406-994-3721 Irew@montana.edu

Start Date of Project: 4/15/2010

End Date of Project: 9/30/2012

Funding Amount: \$10,000

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.

The purpose of this project was to research and evaluate fences for their continued need and impact/benefit to resources. It was thought and confirmed by this research that over half of the parks total fences are not historic alignments, but added by park staff for resource or visitor management. Those that were added by the NPS were

evaluated for their continued need through interviews with park staff – most were still of value. All fences were evaluated for their impact on resources – some were having a minor impact and recommendations were given to mitigate them. In addition, some natural areas were evaluated for additional of fencing, e.g. to protect riparian areas. Finally, an appendix was added that provided information on wildlife friendly fencing techniques and how it might be adapted at Grant-Kohrs Ranch.

Products produced from the project included revised GIS documentation showing location of fences – both existing and extant, and which are located on historic alignment and which are NPS-era. A map was produced that clearly shows this information. A narrative report was also produced which summarized findings and recommendations.

Park resource staff will utilize this research in making future management decisions. Some recommendations will be implemented immediately as time and funds are available, e.g. fencing of young trees and shurbs in riparian areas to protect from grazing and promote full age range of trees and shrubs.

The GIS layers will be located on the park server. The report will exist in hard and electronic copy in park resource staff files and in the library. A copy of the final report will be made available to RM-CESU.

Number of students participating in this project: undergraduates, graduate students, degrees conferred.

- 1 graduate student Phillip Davis primary researcher
- 1 graduate student GIS support