

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Develop Site Specific Cattle Grazing Strategies to Improve Range Health and Diversity

Discipline: Natural Resources
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming
Effective Dates: 5/22/2011 - 3/31/2012
Funding Amount: \$10,000

Investigators and Agency Representative:

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Project Abstract:

Bighorn Canyon National Recreation Area was historically grazed by bison. Later, cows, horses and sheep were the major grazers. In some areas livestock grazing continued on after the parks formation but most areas have not been grazed by livestock for 30-40 years (aside from the Pryor Refuge horses). In some areas, particularly in formerly irrigated pastures reintroducing grazing may be advantageous to the plant community.

One student with Range Management experience and good vegetation identification skills will advise the park about the best areas to benefit from grazing and suggest strategies (rate/duration/timing) to maximize benefit to the plant communities. Once areas are determined, the student will establish permanent point intercept transects in different treatment areas, control areas, and areas slated for future treatment. Plots will be evaluated for species composition, and a spreadsheet will be developed to address grazing strategies for each area included in the project. Plots will also serve as a baseline to monitor treatment effects.

The student will submit a report and recommendation for the reintroduction of grazing at BICA, as well as a database of plot locations and plant community data. Work will begin no later than June 1st 2011 and be completed by September 30th 2011.

Outcomes with Completion Dates:

Draft technical report January 31, 2014, final report due March 31, 2014 along with accompanying field documentation.

Keywords: Grazing, strategies, range health, diversity, Bighorn Canyon NRA, University of Wyoming