

RM-CESU PROJECT STATUS REPORT, FY 06

Project Title: Establish Desired Future Conditions for Mixed Grass Prairie

Park: Sand Creek Massacre National Historic Site

Funding Sources: Rocky Mountain CESU Research Funding (\$10,000)
Park project funds – NRPP (\$10,000), Park Base (\$5000)

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University Partner, PI: Colorado State University, Dr. Roy Roath

Student Participant: Rachael Ridenour

Project Description: This project is a second phase of a vegetation inventory/vegetation community mapping project just completed by Dr. Roath. The vegetation inventory/mapping project defined 27 strata within the site based on Natural Resource Conservation Service and Kiowa County Soil Survey and concluded that most of the strata are lacking key species of their historical climax plant communities (Roath 2006).

Based on these observations, the current study was funded to assist the park in identifying desirable ecological conditions at the site and management alternatives that would:

- Maintain healthy, functioning prairie and riparian habitats representative of Colorado eastern plains ecosystems and support the interpretation and understanding of the natural and cultural resources associated with the site,
- Preserve and enhance native species diversity (plants and animals), including potential species reintroductions, and
- Support natural ecological processes and contribute to the overall ecological integrity of the site (Benjamin 2006).

Project Results: The first phase of the project, the plant inventory/mapping project, has been completed. A draft report was sent to the park and the Southern Plains Inventory and Monitoring Program for review and comment. The second phase (the current project) has been initiated based on the results of the first phase, and will continue into fiscal year 07.

Two meetings and on-site visits of the park's inter-agency natural resources advisory group were held in March and August 2006 to review the inventory/mapping project and to set the direction for the current study (see Benjamin 2006).

Several private landowners along the Big Sandy Creek drainage were contacted to set up a field trip in spring, 2007, to compare conditions within similar riparian/rangeland contexts as the national historic site under different land management scenarios.

Follow-up of this project: The P.I. will continue synthesizing the results of Phase I and documenting the baseline information for Phase II throughout the winter of 2006/2007.

An on-site field visit of the park's inter-agency natural resources advisory team will be held in May, 2007. At that time the status project will be evaluated, further recommendations made and the fieldwork, and analysis and writing will continue through the summer, 2007.

Publications, other reports expected/with dates:

“Site Inventory and Vegetation Interpretation: Prepared for the National Park Service, Sand Creek Massacre National Historic Site” December 2006. Prepared by Roy Roath, Rachel Ridenour, Bob Wesley and Zachary Holme, Colorado State University. Draft Report.

Draft report, Phase II, expected summer, 2007.