

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Assessment of Grassland Condition and Development of Reference Conditions for Three Intermountain Region Parks.

**Type of Project:** Technical Assistance  
**Discipline:** Natural  
**Funding Agency:** National Park Service  
**Other Partners/Cooperators:** University of Colorado at Boulder  
**Effective Dates:** 9/1/2011 - 3/31/2011  
**Funding Amount:** \$12,813

**Investigators and Agency Representative:**

NPS Contact: Robert Bennetts, Program Manager, National Park Service, Southern Plains Network, Capulin Volcano National Monument, PO Box 40, Des Moines, NM 88418; Tel: (719) 846-4663; Email: Robert\_bennetts@nps.gov

Investigator: Timothy Seastedt, Professor, Department of Ecology and Evolutionary Biology Fellow, Institute of Arctic and Alpine Research, University of Colorado, Boulder, CO 80309; Tel: 303-492-3302; email: timothy.seastedt@colorado.edu

**Project Abstract:** One of the challenges in managing grasslands and other resources is that there is often disagreement about how to best manage these resources given differing contexts. There typically is not one "correct" way to view the resources. Rather, one's perspective about the current condition and appropriate reference conditions may vary widely depending on the focus and background of the expert. For example, an appropriate reference condition for grasslands may vary depending on whether the emphasis is on biodiversity, ecosystem functioning, historical context, rare species, etc. This variation in perspective has caused considerable frustration for park managers whose job requires deciding the appropriate emphasis for a given park. Consequently, this project attempts to gain a better understanding by using a team approach whose members come from differing, but related and appropriate, backgrounds. The resulting information will be incorporated into a Natural Resources Condition Assessment being conducted for each of the three park units.

The partner shall, in conjunction with SOPN and NPS park staff, visit each of the three parks (LIBI, SAND, and WABA) to conduct an assessment of the current grassland condition, as well as participate as part of a team to evaluate potential reference conditions for grasslands given the particular contexts of the park (e.g., cultural landscape).

The assessment of current condition will use the qualitative indicators presented in Technical Reference 1734-6 (Pellent et al. 2005) (available online at <http://www.blm.gov/nstc/library/techref.htm>) as an initial foundation for the assessment. However, the partner may choose to modify these indicators or adapt alternative indicators should the situation warrant for a given park, and in consultation with other members of the assessment team.

Reference conditions will include the key attributes used in making the assessment of current conditions, as well as processes such as appropriate fire regimes, that might influence the condition of grasslands. The partner will prepare a report summarizing the conclusions of both the assessment of current conditions as well as potential reference conditions, paying particular attention to areas where there is consensus among experts (which can be incorporated in park management or planning), and where there is disagreement, indicating the need for additional learning.

The partner will also be asked to review the grassland section of the Natural Resources Condition Assessment for each of the three park units to ensure that the information derived from this effort has been fairly and accurately presented.

**Outcomes with Completion Dates:** 30 September 2012 Draft final Assessment

**Keywords:** grasslands, condition assessment, Southern Plains Network, Little Bighorn Battlefield NM, Sand Creek Massacre NHS, and Washita, University of Colorado at Boulder, Institute of Arctic and Alpine Research