

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Inventory rare and listed species at Sand Creek Massacre National Historic Site

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Effective Dates: 3/1/2006 - 1/31/2009

Funding Amount: \$30,460

Investigators and Agency Representative:

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Project Abstract:

Sand Creek Massacre NHS (SAND) was authorized in 2000 with little information on natural resources. Despite this lack of natural resource information SAND must develop several different management plans and a vital signs monitoring program. The Southern Plains Inventory and Monitoring Network (SOPN) and SAND have developed a prioritized list of the most crucial natural resource needs at this park. At the top of this list is to document the presence, abundance and location of endemic and listed species. The primary habitat at the park is short-grass prairie, which is home to several listed and endemic species, including the lesser prairie chicken (*Tympanuchus pallidicinctus*), black-tailed prairie dog (*Cynomys ludovicianus*), mountain plover (*Charadrius montanus*), burrowing owl (*Athene cunicularia*), ferruginous hawk (*Buteo regalis*), Arkansas darter (*Etheostoma cragini*), Colorado bursage (*Ambrosia linearis*), and swift fox (*Vulpes velox*). The presence of a prairie dog town at this site dramatically increases the chances of several listed species being present. The development of park management plans and a vital signs monitoring program requires the knowledge of the presence and condition of these species. Specifically, several of these species are sensitive to grazing practices (including lack of grazing). All grazing has ceased since this park has been acquired by the NPS. SAND cannot manage for rare species and develop appropriate general management plans, resource management plans, a vital signs monitoring program, or grassland management practices if the status of listed species is unknown. Therefore, the objectives of this study are to determine the relative abundance and presence of the above-mentioned species and to develop a study and monitoring plan for these species.

Outcomes with Completion Dates:

- Study Plan for Project
 - Annual activity report describing progress over the 2006 calendar year
 - Final Report.
 - Final Report Summary, 1-2 pages in non-technical terms. This summary should be written for a non-scientific audience and be in the format that can be easily integrated into other park publications (interpretive programs, general management plans).
 - Certification of all species collected during this study in NPSSpecies database.
 - Data entered into NPSSpecies, or excel format suitable for transfer to NPSSpecies.
- Additional funds will be provided in FY 07. Final report is due by the end of 2008

Keywords: rare species; relative abundance, swift fox, Arkansas darter, black-tailed prairie dog, lesser-prairie chicken, mountain plover, ferruginous hawk, burrowing owl, Texas horned lizard, NPSSpecies, inventory, Sand Creek Massacre NHS, Colorado State U

For Administrative Use Only:

Date Annual Report Received:

Date Final Report Received:
Publications, etc. on file: