

## **Project Summary**

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

**Project Title:** Graduate Assistantship to assist with the development of a National Park Service long-term monitoring program.

**Type of Project:** Technical Assistance

**Funding Agency:** National Park Service

**Other Partners/Cooperators:** University of Colorado at Boulder

**Effective Dates:** 2/15/2005 - 1/31/2009

**Funding Amount:** \$19,826.00

**Investigators and Agency Representative:**

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#### **Project Abstract:**

The Southern Plains Inventory and Monitoring Network (SOPN) of the National Park Service in partnership with University of Colorado, Boulder to fill a 4-year Ph.D. Assistantship / Ecologist Position at the University of Colorado - Boulder. The SOPN is developing a long-term monitoring program for 11 national parks in Colorado, New Mexico, Texas, Oklahoma, and Kansas. The position will start in the spring to early summer of 2005. This activity will be part of a dissertation effort of a Ph.D. student accepted into the graduate program of the Department of Ecology and Evolutionary Biology at the University of Colorado. In year 1, the student will work for the summer at the SOPN offices in Johnson City, TX. In the fall the student will return to University of Colorado during the academic year. This arrangement will likely continue during year 2. For years 3 and 4 the student's location will depend on their dissertation topic and the associated logistics. For the first 12-18 months the student will assist with the development and review of conceptual models for the major SOPN ecosystems, assist with the development of vital signs (ecological indicators) that will make up the long-term monitoring project, conduct library research and assist with other SOPN tasks. For the dissertation, the student will work with their advisor and the SOPN network coordinator to select 1-3 of the high priority (as designated by SOPN) vital signs and develop monitoring protocols for applicable network parks. The monitoring protocol will consist of, but not be limited to, field methods (possibly field tested by the student), statistical methods, determination of appropriate number of replicates to detect trends over multiple years, issues of scale, and standard operating procedures.

#### **Outcomes with Completion Dates:**

- Assistance with conceptual model development and vital signs selection.
- Detailed monitoring protocols for 1-3 high priority vital signs.
- Annual activity reports that will describe in detail the SOPN-related activities of the graduate student for the given year.

**Keywords:** graduate assistantship, long-term monitoring, Southern Plains Inventory and Monitoring Network, University of Colorado at Boulder, protocol development

#### **For Administrative Use Only:**

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: