

## **Project Summary**

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

**Project Title:** Acoustic Data Analysis and Park Planning Support

**Discipline:** Interdisciplinary  
**Type of Project:** Research  
**Funding Agency:** National Park Service  
**Other Partners/Cooperators:** Colorado State University  
**Effective Dates:** 9/30/2009 - 12/31/2010  
**Funding Amount:** \$15,280

**Investigators and Agency Representative:**

NPS Contact: Jane Rodgers, Deputy Chief (Socio-Cultural) Science & Resource Management, Grand Canyon National Park, 823 San Francisco, Flagstaff, AZ 86001. Jane\_rodgers@nps.gov (928) 606-5793

Investigator: Dr. Mahmood R. Azimi-Sadjadi, Professor, Department of Electrical and Computer Engineering, C201E Engineering Building, Colorado State University, Fort Collins, CO 80523, 970-491-7956, azimi@engr.colostate.edu

**Project Abstract:** This project provides guidance for monitoring and managing acoustical environments at Grand Canyon National Park. This project will collect data in national park units to inform ongoing park planning efforts with overflights and backcountry management.

*Potential Tasks*

1. Investigate options for separating sound source signatures for Mexican spotted owls.
2. Deploy and maintain environmental sound monitoring systems within Grand Canyon National Park.
3. Create graphical presentations that can summarize data from Grand Canyon National Park as needed for park planning
4. Produce acoustic reports monitoring efforts as needed (Tusayan Museum)

**Outcomes with Completion Dates:**

Acoustical monitoring data will be analyzed and compiled into reports suitable for distribution. Electronic copies of the raw acoustical data and associated metadata, along with acoustical reports and briefing materials will be provided.

Due Date for Final Report and/or Final Products: 30 September 2010

**Keywords:** soundscapes, acoustic monitoring, Grand Canyon National Park, Colorado State University