

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Creating G.I.S. Sound Maps of Rocky Mountain National Park Using Citizen Science

Type of Project: Research
Discipline: Natural
Funding Agency: National Park Service
Other Partners/Cooperators: University of Northern Colorado
Student Involvement: Yes, 5 UNC Geography/GIS students
Effective Dates: 5/1/2015 - 12/31/2016
Funding Amount: \$9,884

Investigators and Agency Representative:

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Investigator: Karen S. Barton, Associate Professor of Geography and G.I.S. University of Northern Colorado, Candelaria 2200, 800 Main Street, Greeley, CO 80639, 970-351-4620, karen.barton@unco.edu

Project Abstract: UNC's Geography and GIS Department has increasingly been recognized for its work on soundscapes, citizen science, and community engagement in Northern Colorado- particularly as this type of engaged research applies to today's youth. This project aims to build upon existing research by way of an educational soundscape mapping project based at Rocky Mountain National Park. The project goal is to locate, record, and map anthroponic, geophonic, and biophonic sounds in order to create G.I.S. sound maps of Rocky Mountain National Park. This acoustical record dovetails with the RMNP Centennial Celebration and the project has the potential to serve as an acoustical benchmark for how the park sounded in 2015. Five UNC Geography/GIS students will assist the PI with field sound recordings and GIS development in order to create a soundscape/citizen science curriculum for use in K-6 classes modeled after Purdue's YELL program (Your Ecosystem Learning Laboratories). The PI's GIS students will be given course credit for summer research work while participating in engaged field work and curriculum development, creating potential partnerships with ROMO personnel that might lead to future internships or careers.

Outcomes with Completion Dates:

RMNP Fieldwork (record sites TBA)	May-August 2015
Spatial Analysis and GIS	November 2015
Create Digital Curriculum for K-6	February 2016
Manuscript to <i>ParkScience</i>	April 2015
Report to CD Learning Center	May 15, 2016

Keywords: citizen science, soundscapes, mapping, GIS, Rocky Mountain National Park, University of Northern Colorado