## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Alpine Biodiversity and Soils Monitoring Utilizing the Global Observation Research Initiative in Alpine Environments (GLORIA) Field Methods: Resurvey at Great Sand Dunes National Park and Preserve (GRSA) and Rocky Mountain National Park (ROMO), Phase 1

Discipline: Natural Resources

Type of Project: Technical Assistance
Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

**Effective Dates:** 8/15/2011 - 6/1/2016

Funding Amount: \$26,556

## Investigators and Agency Representative:

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Project Abstract: The Colorado Natural Heritage Program (CNHP) at Colorado State University (CSU) will assist the National Park Service (NPS) Inventory and Monitoring Program (I&M) Rocky Mountain Network (ROMN) to resurvey established GLORIA monitoring sites in the Great Sand Dunes National Park and Preserve (GRSA) and Rocky Mountain National Park (ROMO). Monitoring of the established sites will follow the protocols established by the Global Observation Research Initiative in Alpine Environments (GLORIA). The GLORIA protocols were developed by the Global Terrestrial Observing System specifically to provide accurate and consistent climate change data to researchers and scientists across the globe (European Commission 2004). The project will provide the NPS and CNHP with important data on the effect of climate change on Park biological resources specifically, and biological diversity generally.

## Outcomes with Completion Dates:

- CNHP provides ROMN with all field sheets, digital files, full species list, and soil samples for ROMO ~September 2013.
- ROMN will deliver to CNHP the user database and excel files with summary reports (e.g. species richness per plot), soil chemistry data, and daily summaries of temperature logger files ~ December 15, 2013.
- CNHP provides ROMN with ROMO monitoring report for publication in the National Resource Data Series by or before February 15, 2014.

Keywords: Global Observation Research Initiative in Alpine Environments (GLORIA), survey, climate change date, biological diversity, Colorado State University, Colorado Natural Heritage Program, National Park Service Inventory and Monitoring Program, at Great Sand Dunes National Park and Preserve, Rocky Mountain National Park