

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Species Relationships of Monteverde Costa Rica with Rocky Mountain National Park, Colorado

Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Utah State University
Effective Date: July 15, 2010 - September 30, 2011
Funding Amount: \$15,000

Investigators and Agency Representative:

NPS Contact: Judy Visty, Research Administrator, Rocky Mountain National Park, 1,000 Highway 36, Estes Park, CO, 80517; 970-586-1434; judy_visty@nps.gov

Investigator: Mark Brunson, Utah State University, EnvS Dept. 5215 Old Main Hill, Logan, UT 84322-5215; mark.brunson@usu.edu; 435/797-2458

Researcher: Summer Olsen, Research Associate, Department of Environment and Society, Utah State University, Logan, UT 84322-5215; (435) 797-8222; summer.c.olsen@usu.edu

Abstract: Global climate change is best thought about at scales larger than individual protected areas (e.g., park units) in order to inform decisions towards the protection of species. This effort will evaluate an existing list of species shared between the Monteverde region of Costa Rica and Rocky Mountain National Park to determine ecological connections. It is currently estimated that the two areas share more than 150 species and that likely migration corridors between the two locations can be identified. It is also hypothesized that portions of migrations corridors may respond to climate change differently affecting plant phenology and consequently affecting migration patterns across a landscape. This project will document foundational information towards a better understanding of these ecological relationships. Products will be produced in both English and Spanish to assist with communication and future collaboration with Costa Rica partners.

Outcomes with Completion Dates: April 30, 2011

1. List of shared species with Monteverde Costa Rica and ROMO in Spanish and English with common/Latin names (January 2011).
2. Summary report (in Spanish and English) explaining the migration patterns of select species and functional groups (March 2011); a summary of known phenology data for the migration corridors.
3. Educational pamphlet with descriptive summary of species including graphics (April 2011)
4. Draft web page that the park can post on its website (April 2011)
5. Poster (with graphics) descriptive summary of species (April 2011)
6. Final report with executive summary (April 30, 2011)

Keywords: Utah State University, Rocky Mountain National Park, Monteverde Costa Rica, protected areas, climate change, ecological connections