

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Biotic Diversity of Aspen Stands In RMNP: Effects of Browsing Enclosures

Type of Project: Research
Discipline: Natural
Funding Agency: National Park Service
Other Partners/Cooperators: University of Northern Colorado
Effective Dates: 5/1/2012 - 12/31/2013
Funding Amount: \$2,134

Investigators and Agency Representative:

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Project Abstract: The objectives of the study are to produce qualitative and quantitative data on the biodiversity (plants, fungi, bryophytes, insects, herps, birds, and mammals) of herbivore enclosures of aspen stands and compare that data to areas still under browsing pressure. Researchers at University of Colorado will sample in both early and late summer to capture seasonal changes and a better estimate of sample diversity. The data will be used to construct feeding webs and elucidate population interactions. The expectation is that community composition in areas excluded from browsing will be different and generally higher in diversity than areas with browsing.

Outcomes with Completion Dates:

The study design should produce a biotic inventory for the aspen stands in the Moraine Park and Beaver Meadows areas of RMNP. In addition, the data should increase our understanding of the effects of herbivore enclosures on the biotic ecosystem and allow a preliminary picture of how population interactions are affected by high browsing pressure. The study will be disseminated during the Bioblitz (with plenty of data and pictures), at the annual RMNP collaborators symposium, and through a final report to RMNP in November 2012, and through a journal manuscript submitted in 2013.

Keywords: Aspen, browsing enclosures, biodiversity, Rocky Mountain National Park, University of Northern Colorado