

Rocky Mountains Cooperative Ecosystem Studies Unit
Project Summary

Project Title: Models and Data for Predicting the Abundance of Moose and Elk on the Summer Range in Rocky Mountain National Park

Task Agreement #: P17AC00863 Modification(s): 1
Discipline: Natural
Type of Project: Technical Assistance/Research
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 7/1/2017 – 12/31/2020
Funding Amount: \$71,000

Investigators and Agency Representative:

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Project Abstract: This cooperative research project will provide tools and information that will assist Rocky Mountain National Park in managing elk and moose populations and the riparian habitat which they utilize. This project will: 1) build on existing elk population modeling, census and collared animals to estimate elk on the summer range 2) develop sampling procedures and data models for aerial infrared elk and moose population estimates 3) obtain location information from GPS collared moose to determine population extant, high use temporal periods within the park, determine if there is a resident vs transient population 4) Use GPS data to estimate moose survival probabilities.

This project will serve a public purpose by providing new knowledge on natural resources, generated by researchers external to the NPS, for the benefit of the greater scientific community. It will also engage university and faculty in shared environmental stewardship. Knowledge obtained from this research will be used to inform park programs for the public and be utilized to create science communications materials on these topics. The modeling and data analysis will support the knowledge and skill development of partners at Colorado State University.

Keywords: population models, elk, moose management, Rocky Mountain National Park, Colorado State University