

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Developing Methods to Understand Elk Movements and Abundance on Winter Range in Rocky Mountain National Park

Discipline: Natural
Type of Project: Technical Assistance/Research
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Student Involvement: Yes, GRA
Effective Dates: 7/15/2013 - 1/31/2017
Funding Amount: \$181,046 [FY15: \$47,961; FY14: \$69,541; FY13: \$63,544]

Investigators and Agency Representative:

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Project Abstract: ROMO is currently involved in an elk management program, concerned with the overabundance of elk, the over browsing of willow and aspen, and the issue of chronic wasting disease (CWD) in park populations. In order to provide the public with information related to the EIS and the Record on Decision for elk management in the park, the resource management staff needs to come up with good population estimates. The park staff will cooperate with data analysts and modelers at Colorado State University to use different methods of estimate the number of elk and where they are moving throughout the landscape. These population estimates will also be used to determine if any elk herd reduction is needed annually to preserve the native vegetation and reduce the spread of CWD in and outside of the park.

The PI, Tom Hobbs, and his graduate student, Alison Cartwright, will synthesize available data on elk populations, and then work with park staff to use models and calibration to compare population estimates. Some of the field data were collected by the NPS, and also the USGS and Colorado Parks and Wildlife. The park will provide the different data sets for the researchers to use in running these models. This is the final year of this three year project.

Outcomes with Completion Dates:

Technical report due March 31, 2016
Final report due July 31, 2015

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