

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Technical Support to Evaluate Fertility Control in Female Elk
Discipline: Natural
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: Colorado State University
Effective Dates: 9/15/2007- 12/31/2009
Funding Amount: \$35,000

Investigators and Agency Representative:

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Project Abstract: Unregulated concentrations of elk (*Cervus elaphus*) have become a significant problem for resource managers in some units of the National Park System (NPS), including Rocky Mountain National Park (ROMO). One potential strategy is controlling the reproduction of female elk. Fertility control has been widely advocated as a non-lethal method for managing the growth of wildlife populations when lethal methods are impractical or unacceptable. The NPS Biological Resource Management Division (BRMD), Wildlife Health Program provides technical assistance and consultation to parks on a variety of wildlife health issues, including fertility control. GonaCon is being considered in ungulate management plans in several NPS units. The BRMD can play an important role in supporting park management decisions by providing data on the field applicability of this contraceptive. Specifically, BRMD has committed to ROMO to evaluate GonaCon in female elk. However, BRMD does not have sufficient capacity to perform evaluations without technical support and expertise from specialists in reproductive biology. We will partner with Colorado State University, Animal Reproduction and Biotechnology Laboratory to provide technical assistance in the form of statistical support and laboratory analysis of samples to investigate reproductive status of ROMO elk.

Outcomes with Completion Dates:

1. Study plan, including statistical power analysis, for the field evaluation of GonaCon in female elk at Rocky Mountain National Park (December 2007).
2. Field support in implementing the GonaCon management study at Rocky Mountain National Park (March 2008).
3. Laboratory analyses of submitted samples for determination of GnRH titers and reproductive status of elk (within 2 months of submission).
4. Report evaluating applicability and effectiveness of GonaCon in preventing pregnancy for one year in wild elk at Rocky Mountain National Park (September 2009).

Keywords: elk, fertility control, NPS- Biological Resource Management Division, Rocky Mountain NP

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Date Annual Report Received:
Date Final Report Received:
Publications, etc. on file: