

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Evaluating the Genetic Structure of Dall's Sheep in Wrangell-St. Elias National Park & Preserve

Discipline: Natural Resources
Type of Project: Research
Funding Agency: National Park Service
Other Partners/Cooperators: University of Montana
Effective Dates: 4/1/2009-12/31/2010
Funding Amount: \$35,790

Investigators and Agency Representative:

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Project Abstract: UM Researchers will determine the genetic structure of the Dall's sheep population in Wrangell-St.Elias National Park (WRST) by obtaining DNA from fresh sheep feces collected in late summer and tissue samples from hunter-killed sheep. With information derived from these samples, we will assess the population genetic structure and identify landscape features influencing Dall's sheep in WRST. We will develop and validate the noninvasive fecal DNA analysis techniques and derive a cost-effective protocol for large-scale evaluations of the genetic structure of free-ranging sheep populations.

Outcomes with Completion Dates:

The final report, consisting of 2 manuscript drafts and one report will be provided by 31 December 2010 containing a summary of research activities, results, and a discussion of management implications of the findings

Keywords: Wrangell-St.Elias NP, Dall's sheep, genetic structure, DNA analysis, University of Montana