

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Marmots on the Move? Dispersal in a Declining Mountain Mammal
Type of Project: Research
Discipline: Natural Resource
Funding Agency: National Park Service
Other Partners/Cooperators: University of Montana, North Coast and Cascades RLN
Effective Dates: 4/1/2007 - 12/31/2008
Funding Amount: \$12,500

Investigators and Agency Representative:

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Project Abstract:

Olympic marmots (*Marmota olympus*) are large, burrowing endemic rodents inhabiting scattered subalpine meadows in Olympic National Park and the surrounding national forest. Over the past 25 years, they have disappeared from many locations and the remaining population is increasingly fragmented. The most likely management action would be translocation of marmots to bolster or reestablish local populations. Knowledge of how far and how often these marmots are likely to disperse on their own would greatly improve the efficacy of such a translocation program, yet little is known about dispersal patterns in Olympic marmots.

Researchers from the University of Montana will use existing and newly collected data from radio-tagged marmots to enhance our understanding of Olympic Marmot dispersal rates. Fifty-three marmots, previously equipped with surgically implanted radio-transmitters, will be monitored >2 times weekly during 2007. Data from 2007 will be combined with data collected in 2003-2006, and will be used to parameterize and compare competing models of dispersal rates and distances. Data layers and GIS expertise from the Park will assist with data analysis and reporting. The rate estimates and the distance curves can then be used to construct plausible probabilities that marmots will recolonize individual sites without translocation. Information gained from this research will provide information critical to the effective long-term management of this declining endemic species in Olympic NP.

Outcomes with Completion Dates: Draft report for NPS review will be prepared by March 2008; Final report due by June 2008

Keywords: Olympic NP; marmots; dispersal; University of Montana

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