

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Population distribution of snowshoe hares in Yellowstone National Park
Type of Project: Research/biological sciences
Funding Agency: National Park Service
Effective Dates: May 15, 2003 - June 1, 2004
Funding Amount: \$10,000
Investigators and Agency Representative: NPS Key Official: Kerry Murphy, Yellowstone NP, POB 168, Yellowstone, NP, Wyoming 82190, 307-344-2240; kerry_murphy@nps.gov UNIVERSITY CONTACT: Karen Hodges, Wildlife Biology Program, School of Forestry, University of Montana, Missoula, Mt 59812; 406-243-5552; khodges@forestry.umt.edu
Project Abstract: Scope of Work We will use counts of fecal pellets and live-trapping to estimate the relative abundance of snowshoe hares across a variety of forest types and successional stages within Yellowstone National Park. We will re-survey sites we used in 2002, as well as using GIS to identify additional sites to increase our coverage of the Park. Survey data will consist primarily of counts of fecal pellets. In 2001-2002, we analyzed this methodology using data from western Montana and YNP so as to develop the optimal sampling strategy. On sites where we caught hares last year, and on a subset of sites with high pellet counts, we will live-trap hares to obtain mark-recapture estimates of hare density. This stratification of our sampling effort will maximize our field efficiency.
Outcomes with completion dates: Final Products: Our research will provide the following: 1) data on snowshoe hare relative abundance in relation to forest stand type, landscape pattern, and location within YNP; 2) demographic data from snowshoe hare 'hotspots' that we can link with ongoing YNP lynx surveys; and 3) a survey design and network of sites that can be used through time to address changes in snowshoe hare abundance in YNP.
Keywords: Yellowstone National Park, snowshoe hares, population distribution, habitat assessment
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