Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Assessment of Whitebark Pine Habitat in Yellowstone NP

Type of Project: Research

Funding Agency: National Park Service- RM CESU

Other Partners/Cooperators: University of Montana; USDA-Forest Service

Effective Dates: May 2005 – June 2006

Funding Amount: $8,460

Investigators and Agency Representative:
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Abstract:
Shawn McKinney, a graduate student at The University of Montana will work during summer 2005 in both Yellowstone NP and the Gallatin NF on the issue of mortality of whitebark pine (*Pinus albicaulis*) due To infection by blister rust. This introduced rust species has infected five needle pines throughout Western North America. Long term restoration of whitebark pine will require management strategies, including use of fire, thinning of competitors, and planting of nursery-grown seedlings.
Field methods during this study will include choosing study sites within existing whitebark pine stands. At these sites we will count fund of cones per tree in early July and in late August. We will monitor a number of environmental, structural and compositional variables around each "cone" tree. These data will form the reference data set for more intensive site investigations in summer 2006. A final dissertation will result from this study, with a comparison of whitebark pine regeneration and mortality between sites in the Greater Yellowstone area, with sites in the Crown of the Continent Ecosystem, including Glacier NP.

Outcomes with completion dates:

- Interim Report describing work accomplished and preliminary findings from summer 2005.
- Plan for further research in the Greater Yellowstone Ecosystem.

Keywords: whitebark pine, seed dispersal potential, restoration, natural regeneration, Yellowstone NP, Gallatin NF, University of Montana, blister rust

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