

## **Project Summary**

### **Rocky Mountains Cooperative Ecosystem Studies Unit**

**Project Title:** Restoration with Whitebark Pine seedlings on Dunraven Pass, Yellowstone National Park: availability of native mycorrhizal fungi in soil

**Discipline:** Natural Resources

**Type of Project:** Technical assistance

**Funding Agency:** National Park Service

**Other Partners/Cooperators:** Montana State University

**Effective Dates:** 3/1/2007 - 8/15/2008

**Funding Amount:** \$5,000

**Investigators and Agency Representative:**

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**Project Abstract:** Cooperators will work with the NPS on a project to determine the best methods for restoring whitebark pine seedlings to impacted sites in the Dunraven Pass area of Yellowstone National Park. Tasks include:

- Soil sampling in Yellowstone National Park in areas where nursery whitebark pine seedlings are to be planted
- Initial reconnaissance to observe whitebark pine seedlings planted along Dunraven Pass
- Pick up extra nursery whitebark pine seedlings, and set up whitebark pine seedling assay in Plant Growth Center, MSU
- Maintain whitebark pine seedling assay in Plant Growth Center, MSU
- Complete Greenhouse Soil Bioassay (MSU)
- Site visits to planting areas in summer 2007
- 2 collecting trips for fungi in whitebark pine forests
- Sampling of whitebark pine seedling roots (July/Aug 2007)
- Root processing: screening & morphotyping
- Root processing: molecular analysis
- Analysis of Greenhouse Bioassay, Plant Growth Center, MSU
- Analysis of Site Monitoring for Mycorrhizae

**Outcomes with Completion Dates:** Due by February 2008, report documenting results of Greenhouse and Dunraven soil bioassays and whitebark pine seedling root bioassays

**Keywords:** Yellowstone National Park, Dunraven Pass, whitebark pine, restoration, soils, mycorrhizal fungi, Montana State University

**For Administrative Use Only:**

Date Annual Report Received:

Date Final Report Received:

Publications, etc. on file: