

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Integrated Analysis Modeling, and Synthesis of the Impacts of Blister Rust and Mountain Pine Beetle Mortality to Whitebark Pine in the Greater Yellowstone Ecosystem

Type of Project: Technical Assistance

Project Discipline: Natural

Funding Agency: USGS

Other Partners/Cooperators: Montana State University

Effective Dates: 8/12/2009 - 7/31/2011

Funding Amount: \$50,000 [FY10: \$30,000; FY11: \$20,000]

Investigators and Agency Representative:

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Project Abstract:

The objectives of this project are to:

- Develop quantitative models that best explain the distribution and abundance of blister rust infection in WPB (Whitebark pine, *Pinus albicaulis*) in the GYE (Greater Yellowstone Ecosystem).
- Develop quantitative models that best explain the distribution and abundance of mountain pine beetle mortality in WPE in the GYE.
- Develop quantitative models that best explain recruitment rates of juvenile whitebark pine within existing stands of mature WBP and implications for forest regeneration.

Outcomes with completion dates: July 31, 2011

Keywords: quantitative models, Blister Rust, Mountain Pine Beetle, Whitebark Pine, Mortality Greater Yellowstone Ecosystem, USGS, Montana State University