

****Whitebark Pine and Clark's Nutcracker Abundance in Glacier National Park**

Vladimir Kovalenko*, University of Montana, National Park Service, Missoula
Lisa Bate, Glacier National Park, West Glacier, MT
Jeffrey Doser, Michigan State University, East Lansing
Victoria Dreitz, Avian Science Center, University of Montana, Missoula
Cara Nelson, Nelson Restoration Ecology Lab, University of Montana, Missoula
Diana Six, Six Lab, Missoula, MT

*Indicates Presenter

**Indicates Student Presentation

Whitebark pine (*Pinus albicaulis*) is in decline in many places across its range, and most notably in the Northern Continental Divide Ecosystem which includes Glacier National Park (GNP). White pine blister rust, caused by non-native fungus *Cronartium ribicola*, is the prevailing cause of whitebark mortality in the ecosystem, with an estimated mortality rate of 69.3% in GNP. The local population of Clark's nutcracker (*Nucifraga columbiana*), whitebark pine mutualist and sole seed dispersal vector, is not well studied. Using in-person point count surveys and automated acoustic recorders, we modelled nutcracker abundance at sites throughout GNP using Bayesian joint likelihood.