

Rocky Mountains Cooperative Ecosystem Studies Unit
Project Summary

Project Title: Developing Predictive Capacity to Support Adaptive Management Strategies for Mountain Goats

Discipline: Natural

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: Colorado State University

Student Participation: Yes, PHD

Effective Dates: May 2018-July 2021

Funding Amount: \$47,326

Investigators and Agency Representative:

NPS ATR: Mark J. Biel, Natural Resources Program Manager, National Park Service, Glacier National Park, 26 Ruhle Dr, PO Box 128, West Glacier, MT 59936, 406-888-7919, 406-888-7990, mark_biel@nps.gov

Investigator: Dr. Joel Berger, Cox Chair of Co, Colorado State University, Department of FWC Biology, Colorado State University, Fort Collins, CO 80523, 208-351-5124, jberger@wcs.org

Project Abstract:

Project Goals – The overall goal of this request is to provide predictive capacity about the demography and distributional response of mountain goats in Glacier National Park and other alpine environments on adjacent state, federal, and tribal lands where mountain goats occur.

Project Objectives – The objectives for this request are to: Relate demographic parameters (parturition rates, kid survival, yearling survival) and body condition indices (growth and/or body mass of adult females and juveniles) to annual measurements of climate, snow pack, productivity, and phenology of vegetation on important summer habitats for goats; Relate assimilated nutrition of goats to vegetation productivity and phenology; Relate vegetation and snow conditions to yearly climatic conditions; and Document habitat use by goats on a fine scale during summer, and a coarse scale during winter, to understand patterns and sources of mortality and mountain-goat productivity.