Project Title: Parks, People, and Prey: Direct and Indirect Effects on Mountain Goat Ecology in Glacier National Park

Type of Project:ResearchDiscipline:Natural ResourcesFunding Agency:National Park ServiceOther Partners/Cooperators:University of MontanaStudent Involvement:Yes, graduate studentEffective Dates:7/28/2013 - 12/31/2016Funding Amount:\$153,902 [FY16: \$7,049; FY13: \$146,853]

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Project Abstract: Among the many challenges inherent in understanding relationships among people and wildlife are effects of roads. In Glacier National Park, a continuing effort is the development of comprehensive corridor plan for Going-to-the-Sun Road. In the Logan Pass and Highline Trail regions, mountain goats and people interact. Little is known about direct or indirect consequences of such behavior, or whether management of such interactions may be desirable. This pilot study will help frame a broader understanding of how mountain goats are affected by roads, people and possible predators, and adjacent trails. Immediate goals are to i) assess how goats use roads and adjacent trails, ii) map the intensity of interactions with people, and iii) develop baseline data on effects of roads, adjacent trails and people in relation to other factors that affect goat distribution. Among key objectives are to determine: i) whether the same or different goats use Logan Pass and the Highline area yearly, ii) timing of movements into and beyond the Logan Pass/Highline Trail area, and iii) relationships between goats and humans, particularly patterns of habituation and goat-directed aggression, if at all, to humans. Additional components of the study will assess the extent to which goat reliance on humans result in 'unnatural' behavior including patterns of grouping and sex differences in attraction to human constructs, whether goats use roads, popular adjacent trails, and people as safe havens from predators, and effectiveness of possible deterrents to problem goats.

**Outcomes with Completion Dates:** December 31, 2016 - Provide final thesis, all GIS data, reports, additional publications created, maps, copies of field notes, etc. to NPS.

**Keywords:** mountain goats, people, human-wildlife interactions, roads, trails, predators, behavioral effect, Glacier National Park, University of Montana, Division of Biological Sciences