Rocky Mountains Cooperative Ecosystem Studies Unit
Project Summary

Project Title: Developing a noninvasive method for obtaining demographic and genetic monitoring data for the endangered Sonoran pronghorn and bighorn sheep in Organ Pipe Cactus National Monument, Mexico, and surrounding areas

Discipline: Natural
Type of Project: Technical Assistance/Research
Funding Agency: National Park Service
Other Partners/Cooperators: University of Idaho
Student Participation: Yes, student research assistant
Effective Dates: 1/15/2017 – 8/30/2018
Funding Amount: $49,306

Investigators and Agency Representative:
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Investigator: Lisette Waits, Distinguished Professor and Department Head, University of Idaho, Department of Fish and Wildlife Sciences, 875 Perimeter Drive MS, Moscow, Idaho 83843-2010; 208-885- 7823; lwaits@uidaho.edu

Project Abstract: The objective of this Agreement is to facilitate field and lab research on two species important to the desert southwest ecosystem, the highly-endangered Sonoran pronghorn and bighorn sheep. Researchers aim to measure population size, survival, genetic diversity, gene flow, and connectivity using noninvasive genetic sampling methods. Funding will support travel by the Principal Investigator, wages and benefits for researchers and student research assistants (excluding the PI), supplies, and use of lab equipment. The project will generate new knowledge by collecting data on the two species, which will help inform management practices in US and Mexican protected areas, and by increasing expertise in collection and testing methodologies. Data will be shared with the broader scientific community through peer-reviewed journals and conference presentations; the project will provide NPS staff with training in the sampling protocols used. In addition to building on prior research by the PI and partners, the project continues a collaborative relationship with the University of Arizona.

Keywords: noninvasive monitoring, Sonoran pronghorn, bighorn sheep, Organ Pipe Cactus National Monument, Mexico, University of Idaho, National Park Service