

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Pikas in peril: multi-regional vulnerability assessment of a climate-sensitive sentinel species

Discipline: Natural Resources
Type of Project: Research
Funding Agency: National Park Service
Other Partners/Cooperators: University of Idaho
Effective Dates: 7/1/2010- 6/1/2015
Funding Amount: \$164,133 (FY12: \$35,889; FY11: \$113,486; FY10: \$14,758)

Investigators and Agency Representative:

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Project Abstract: The purpose of this project is to 1) document pika occurrence patterns and generate predictive models of current habitat in eight National Park System units, 2) measure gene flow and model recent connectivity of pika populations within five NPS units, and 3) project effects of climate change on the distribution, connectivity and vulnerability of pika populations in all study areas. We will use standardized methods to assess pika occupancy patterns and genetic structure across parks, ensuring that data are of sufficient breadth, quality and consistency to support comparable analyses of population vulnerability at local and regional scales. This research will use an ideal model species to generate valuable data directly applicable to the core mission of the NPS and address key questions as the agency grapples with climate change into the future.

Outcomes with Completion Dates: June 1, 2016

Keywords: Picas, population habitat, climate change, Upper Columbia Basin Network Inventory and Monitoring Program (including CRLA, LAVO, and LBE in the western US), University of Idaho