

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

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

Type of Project: Research
Discipline: Natural
Funding Agency: National Park Service
Other Partners/Cooperators: University of Colorado at Boulder
Effective Dates: May 17, 2010 - December 31, 2013
Funding Amount: \$84,046

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: December 31, 2013

Keywords: pika surveys, Great Sand Dunes National Park (GRSA), Rocky Mountain National Park (ROMO), and other high elevation parks in the western US, Rocky Mountain Inventory and Monitoring, University of Colorado at Boulder