



Pika Research and Monitoring at Grand Teton NP



A technician conducting a pika survey at Grand Teton NP (above) and a pika (lower left).

Importance: Species Vulnerable to Climate Change

The American pika (*Ochotona princeps*) is considered an indicator species for detecting ecological effects of climate change. Results from recent studies suggest that in some areas pikas are being lost from lower elevations in response to increased warming and a subsequent reduction in suitable habitat. The National Park Service has a unique opportunity to assess the vulnerability of pikas to climate change by studying pika populations within western U.S. parks. Grand Teton National Park provides classic talus pika habitat and is one of eight National Park Service units included in a 3-year research project, titled “Pikas in Peril.” Additionally, the park will be using this information to establish a long-term pika monitoring program.

Project objectives

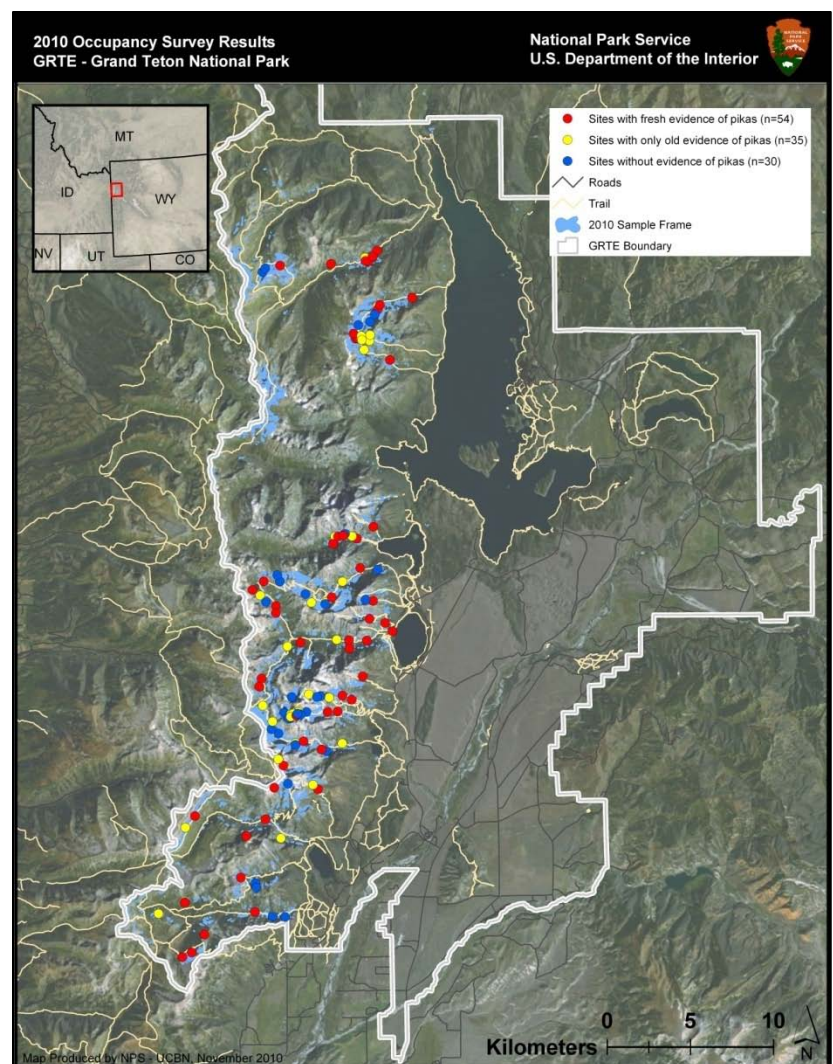
1. Document pika occurrence patterns and predict pika distribution across eight park units.
2. Measure gene flow and model connectivity of pika populations within five park units (Grand Teton NP included).
3. Project climate change effects on the future distribution, connectivity and vulnerability of pika populations in each park unit.

Methods and Preliminary Results

From July to October 2010, 119 randomly-selected sites (12-m radius circular plots) were searched for evidence of pika occupancy in the form of visual encounters, calls, fresh fecal pellets, and fresh food caches found within the site. Pikas occupied 54 (45%) of the sites surveyed, and a total of 112 fresh fecal pellet samples were collected for genetic analysis.

Timeline and Future Plans

Data analysis will continue fall and winter 2010. Surveys of additional sites as well as resurveys of current sites are scheduled for late summer 2011 and a final project report is due 2012. Additionally, these sites will be monitored over time to detect trends in pika site occupancy. Further details and results for Grand Teton NP and the other parks will be available on the website listed below.



Map of 2010 occupancy survey results for Grand Teton NP.

Contact Information

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