

# Discussion #1: Sierra Nevada

## *Habitat Quality:*

Continuous, Clast size, Elevation range (crest to basin);

→ Orogeny; Glacial history (periglacial process);  
Substrates (clast size); Climate Mediterranean/  
Pacific influence (winter snowpack); Orography/lapse

→ Elevation  $\neq$  Thermal Condition at micro-scale

## *Pika Status:*

Habitats appear to be saturated

Millar & Westfall 2010; 329 sites in SN

Millar, unpub 2011; N = 532 sites in SN

# Even locally, pika have very wide elevation ranges

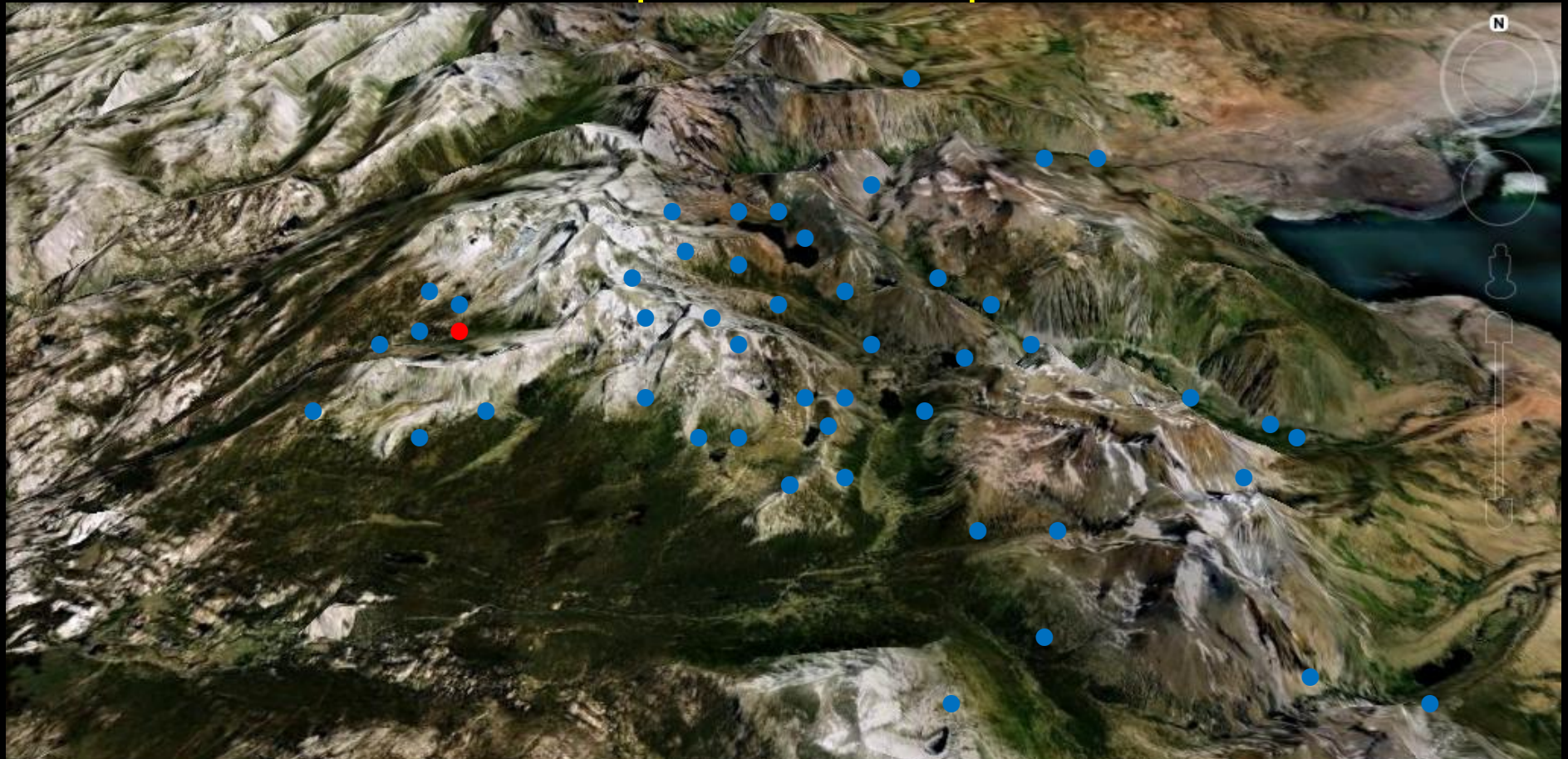
Low-High elevation pairs for 6 canyons, Sierra Nevada



...occupying available habitat from lowest to highest elevations

Mono Basin pika range: 2191m - 3981m  
=1790m (5872ft) elevation span

## How do we interpret active sites that surround extirpated historic pika sites?



Grinnell pika transect (+153m): lowest site (●~9900')  
extirpated, but active pika sites adjacent, far above, and far below (●)

Image © 2011 DigitalGlobe  
Image USDA Farm Service Agency

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Imagery Date: 5/24/2009

37°53'31.63" N 119°16'25.33" W elev 10020 ft

Eye alt 11.04 mi