



PIKA DISTRIBUTION IN CALIFORNIA ?

- *Reliable estimates of population trend, species range, abundance, habitat requirements, in part depend on reliable estimates of the species DISTRIBUTION.*

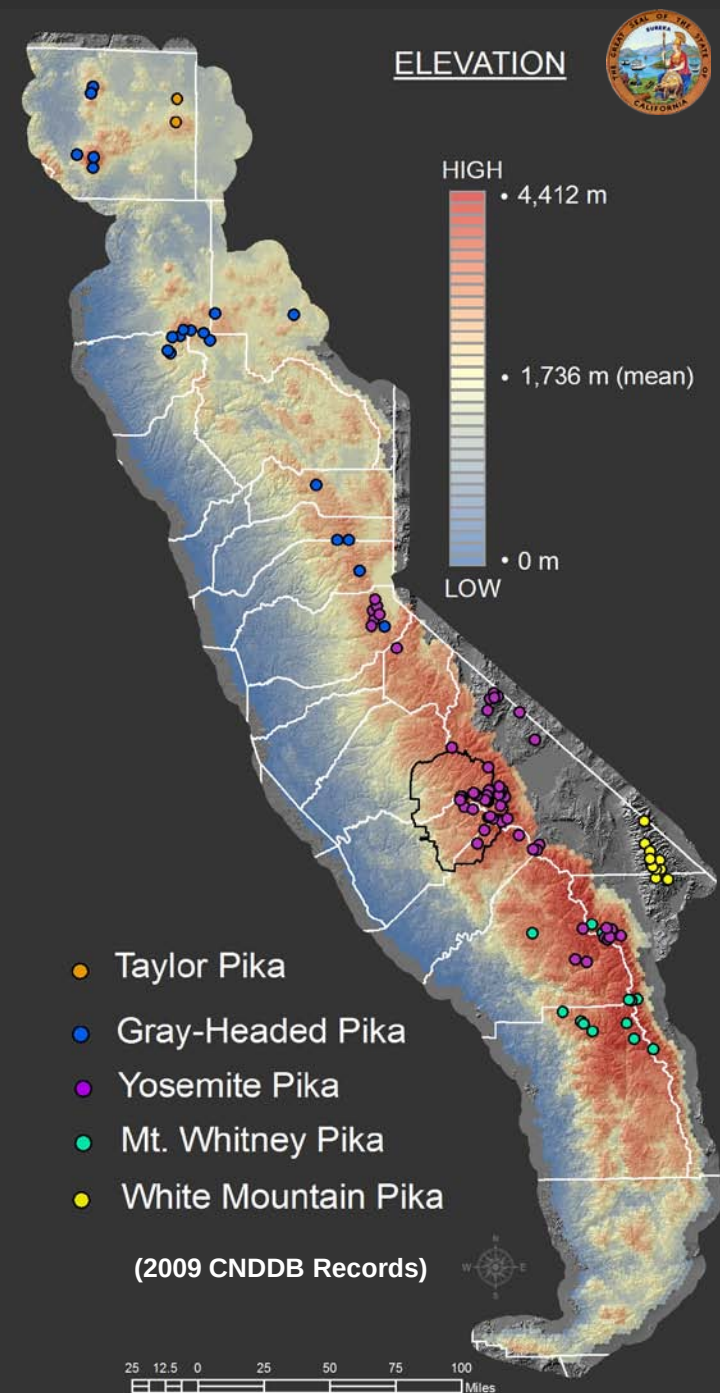
HOW ?

CONDUCT FIELD SURVEYS OF
POTENTIALLY SUITABLE HABITAT



ACCURATE, SPATIALLY EXPLICIT,
HABITAT SUITABILITY MODELS

	Avg. Elev. (ft)	Max. Temp. (F)	Avg. Precip. (mm)
Taylor Pika (N=2)	6041	58.5	685.0
Gray-Headed Pika (N=20)	6771	55.8	1447.6
Yosemite Pika (N=56)	9594	50.2	1039.6
Mt. Whitney Pika (N=14)	10,035	47.0	836.0
White Mountain Pika (N=11)	10,632	46.9	391.3



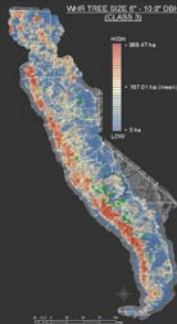
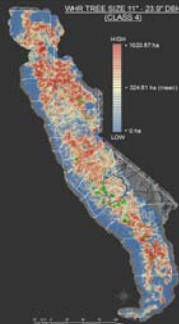
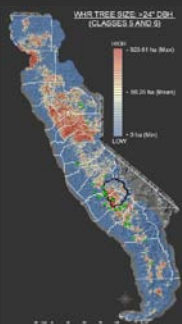
Environmental Variables

Distribution of WHR tree size classes

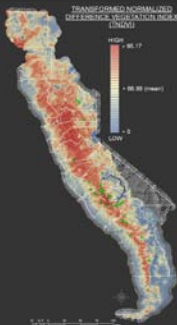
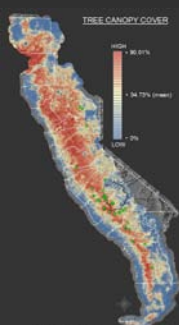
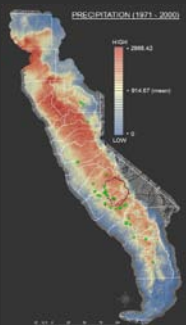
> 24"DBH

12"-24"DBH

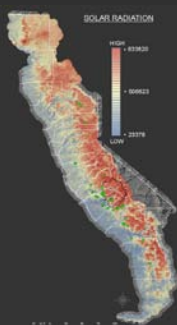
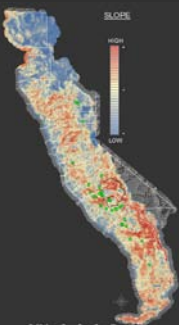
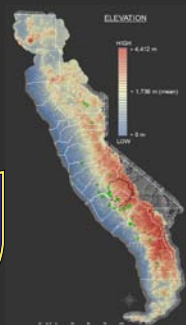
<12"DBH



Precipitation, Canopy, and TNDVI



Elevation, Slope, and Solar Radiation



Model Results

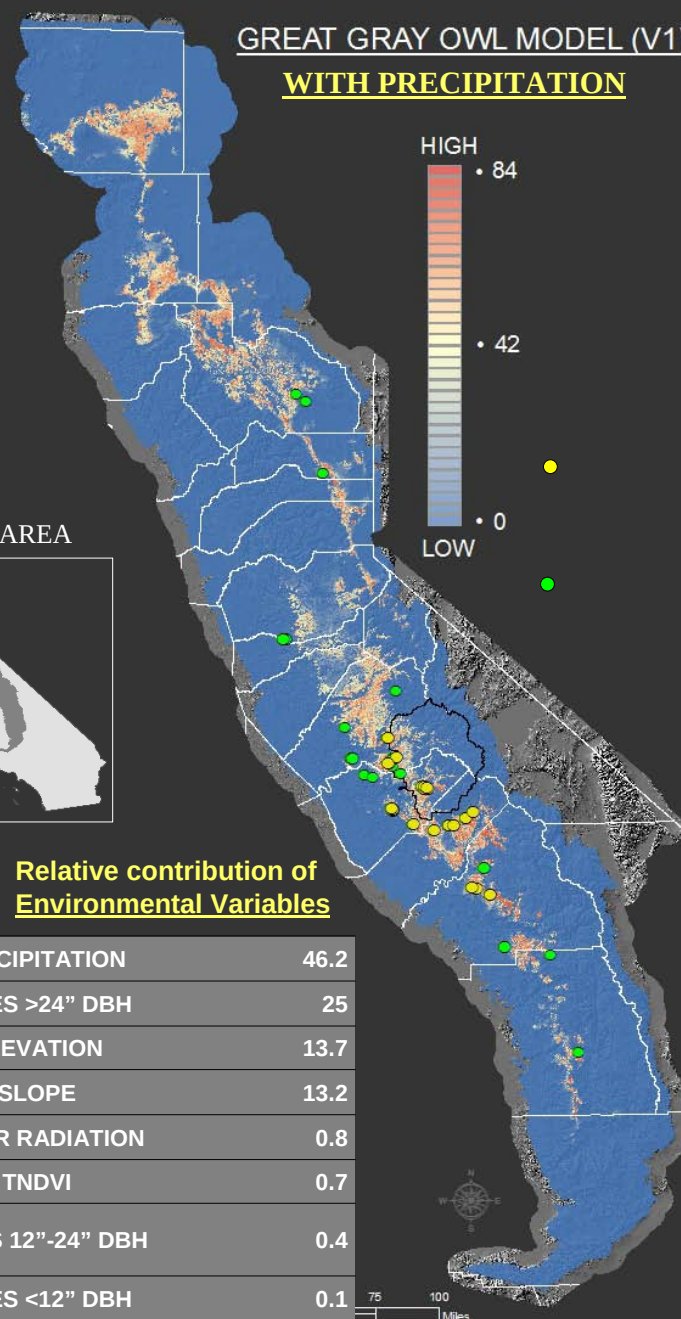
GREAT GRAY OWL MODEL (V1) WITH PRECIPITATION

STUDY AREA



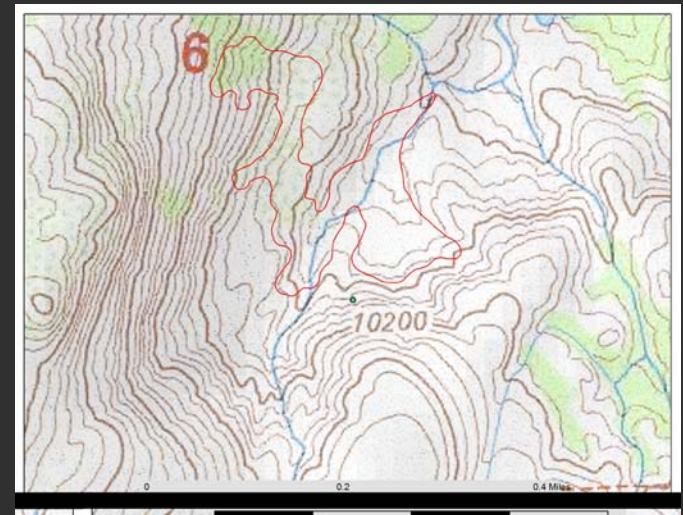
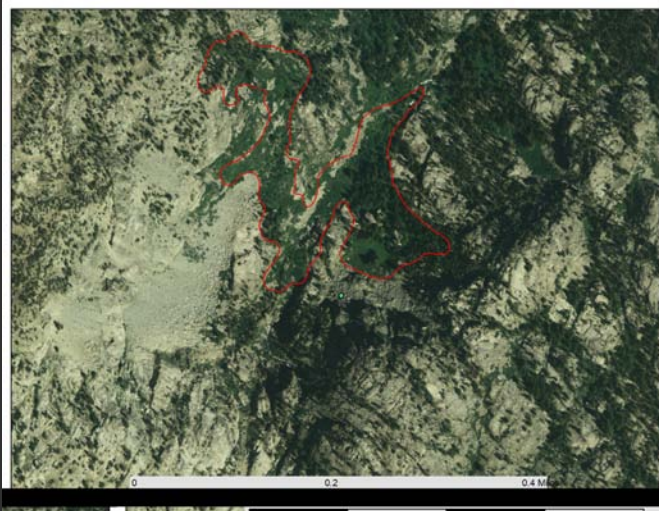
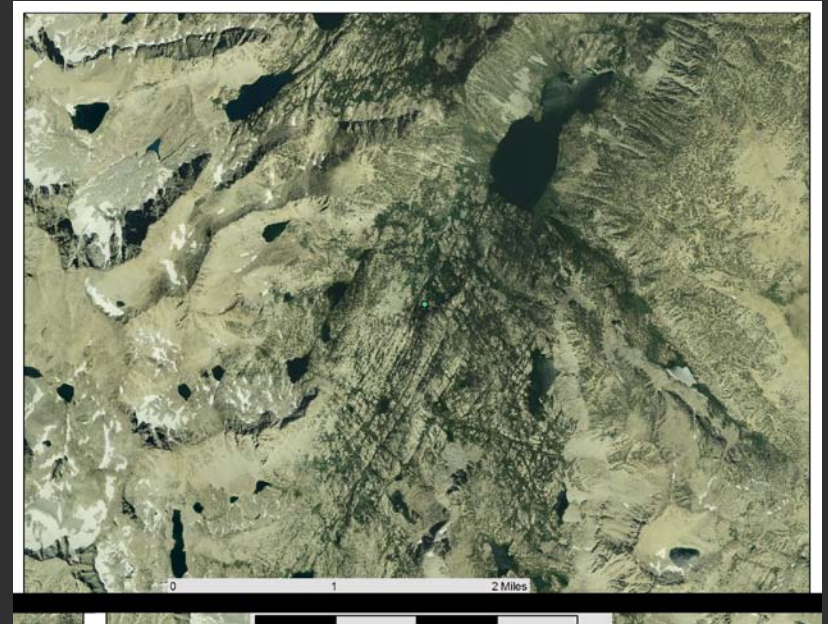
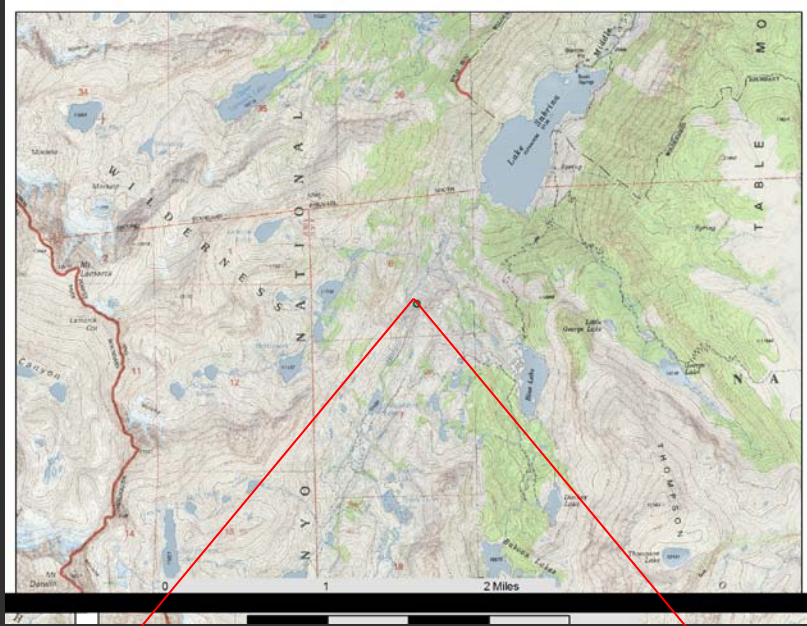
Relative contribution of Environmental Variables

PRECIPITATION	46.2
TREES >24" DBH	25
ELEVATION	13.7
SLOPE	13.2
SOLAR RADIATION	0.8
TNDVI	0.7
TREES 12"-24" DBH	0.4
TREES <12" DBH	0.1





High Model Prediction Probability = Efficient Surveys





What spatial layers do we need to improve our ability to predict Pika habitat ?

1. Polygon layer of Alpine Meadows ?
2. Delineate Talus Slopes ?
3. ?
4. ?

