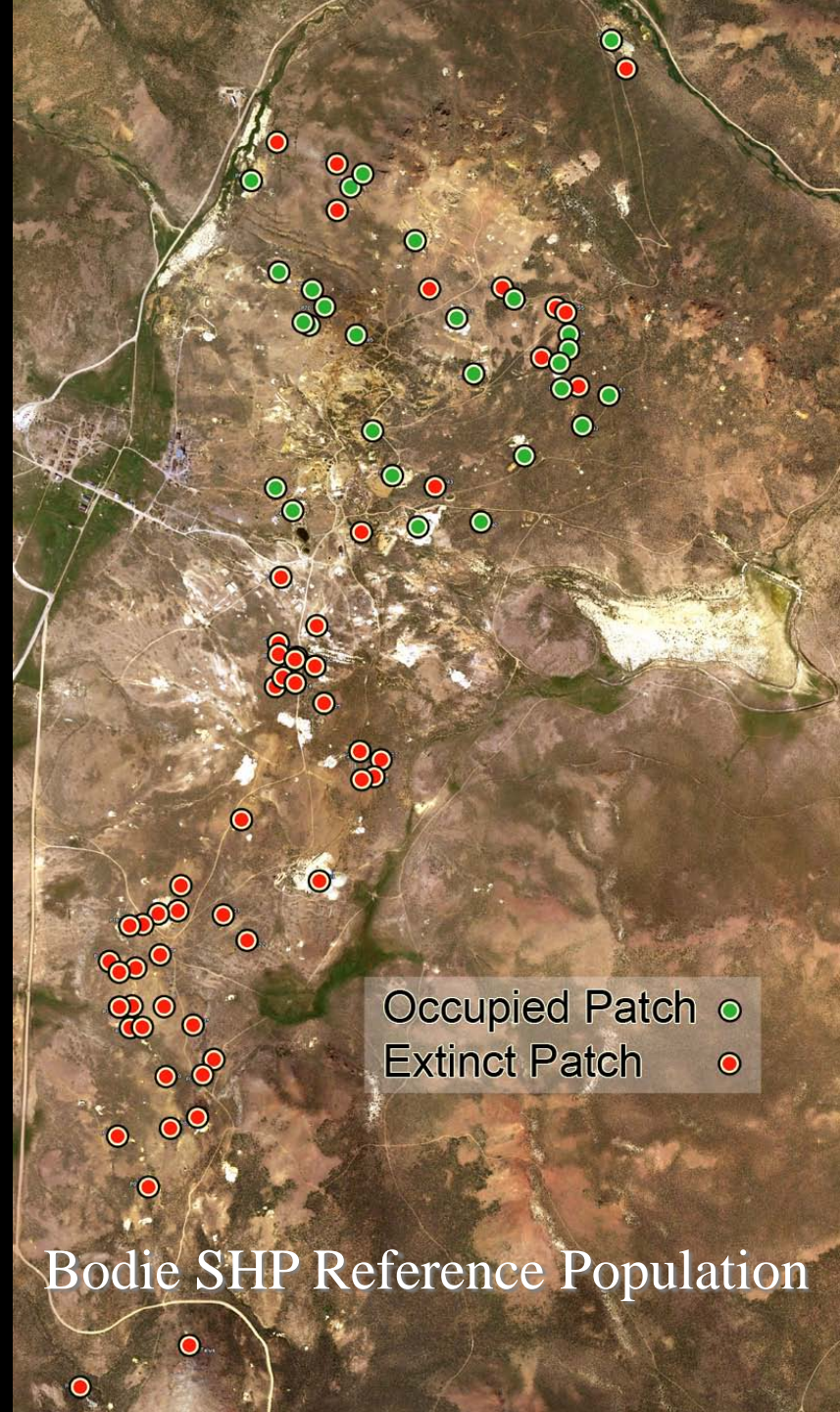


DATING BODIE HILLS PIKA EXTINCTIONS USING FECAL PELLETS

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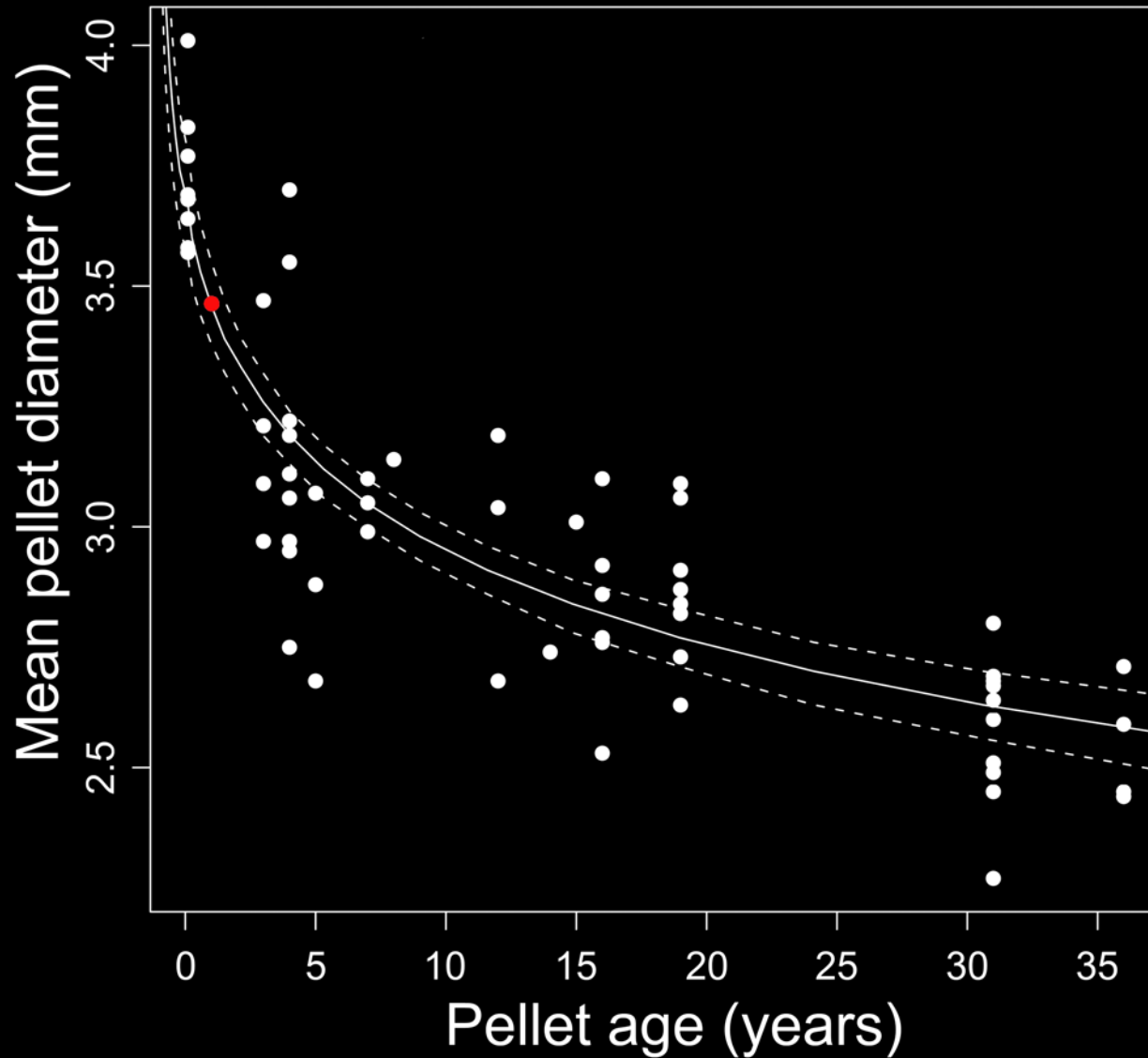


Aging Pika Pellets



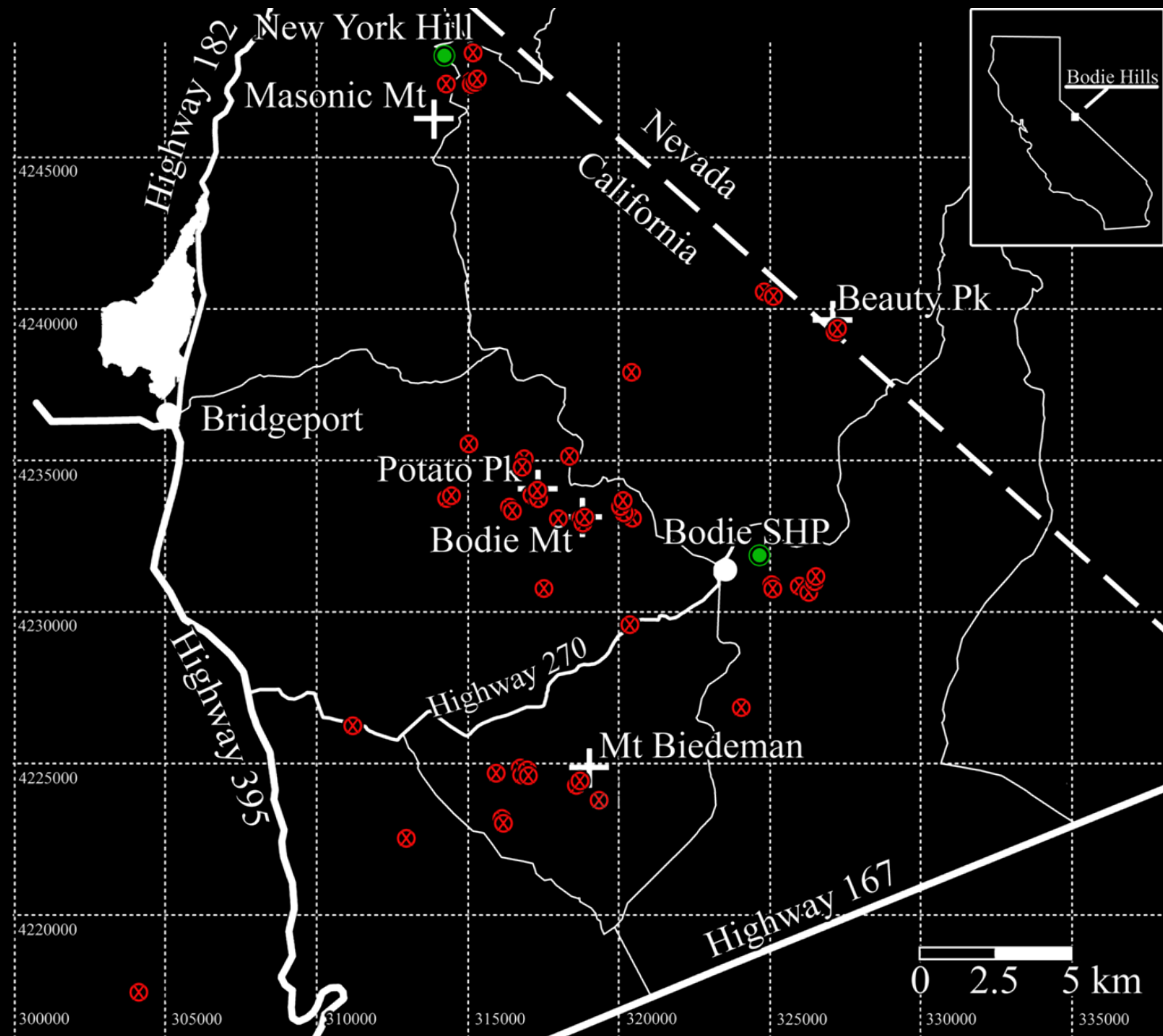
<u>Qualitative Age</u>	<u>Chronological Age</u>	<u>Pellet Exterior</u>	<u>Pellet Interior</u>
“Fresh”	Deposited within the past week	Greenish brown	Bright green; fibrous material holds together when crushed
“Moderately fresh”	One week to several months old	Greenish brown	Yellow-Green; fibrous material friable when crushed
“Moderately old”	Several months to 4 years old	Brown	Brown; fibrous material friable when crushed
“Old”	5 to 12 years old	Light gray	Light gray; powdery when crushed
“Very old”	Older than 12 years	Charcoal gray	Charcoal gray; powdery when crushed

Pellet Chronometer

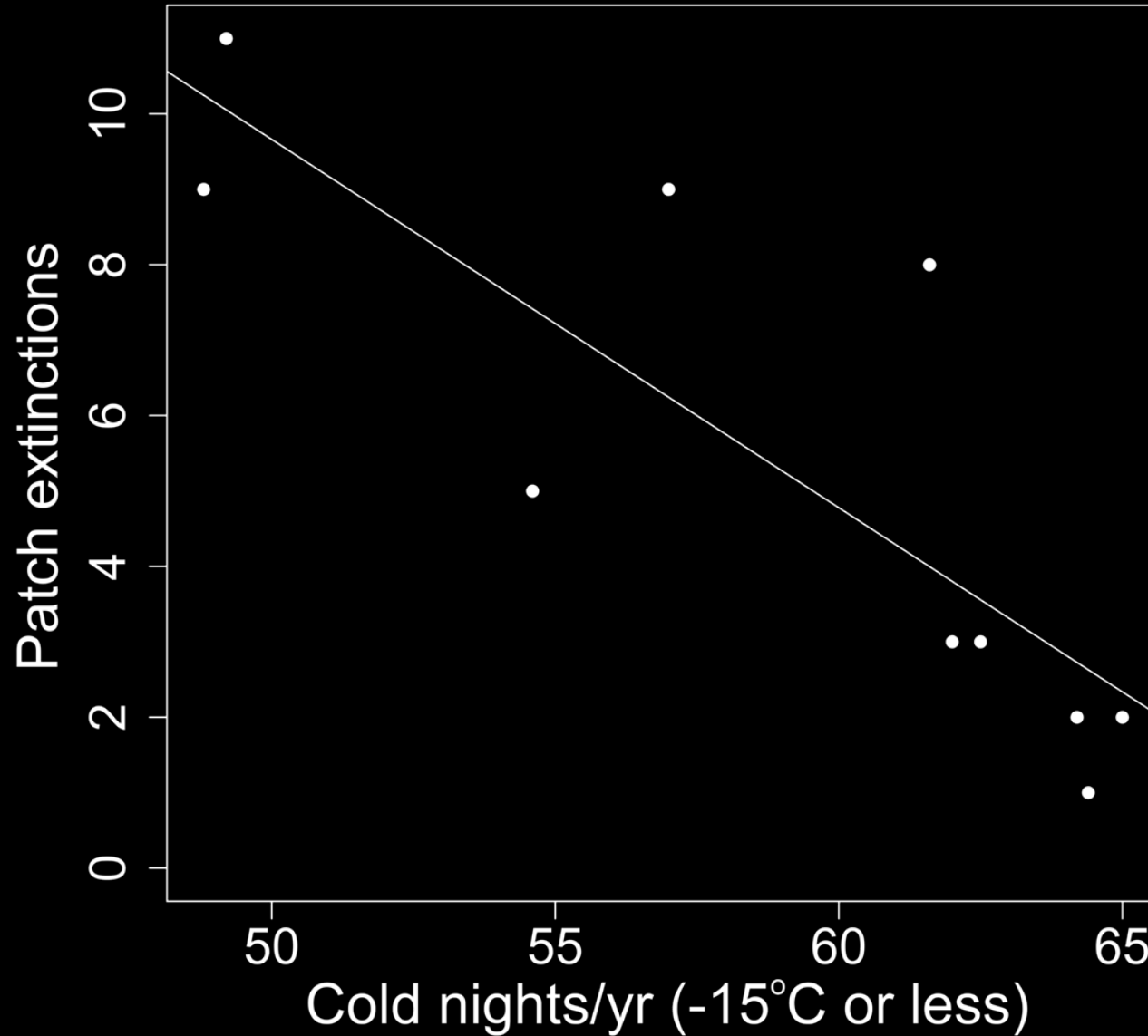


Mean pellet diameter (mm) = $-0.697 \cdot \text{Log}(\text{Pellet age (yrs)}) + 3.67$
 $R^2 = 0.76$, $F(1, 60) = 189.6$, $p < 2.2 \times 10^{-16}$. Dotted lines represent 95% CI

Status of American Pikas in the Bodie Hills, California



Bodie Hills Pika Extinctions & Climate



$$\text{Patch Extinctions} = -0.4883 * (\text{cold nights/yr}) + 34.1$$

$$R^2 = 0.69, F(1, 8), p = 0.003$$