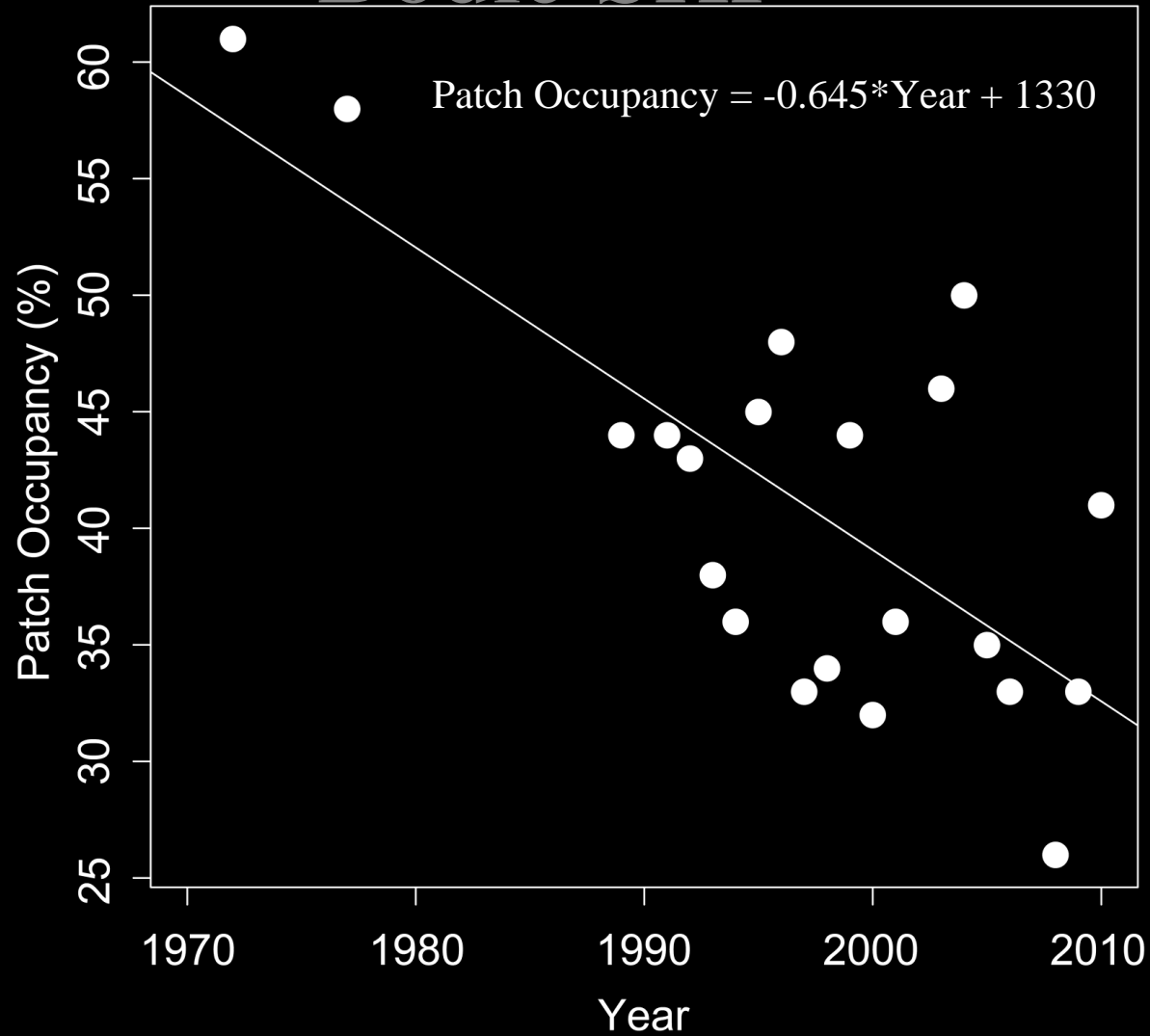
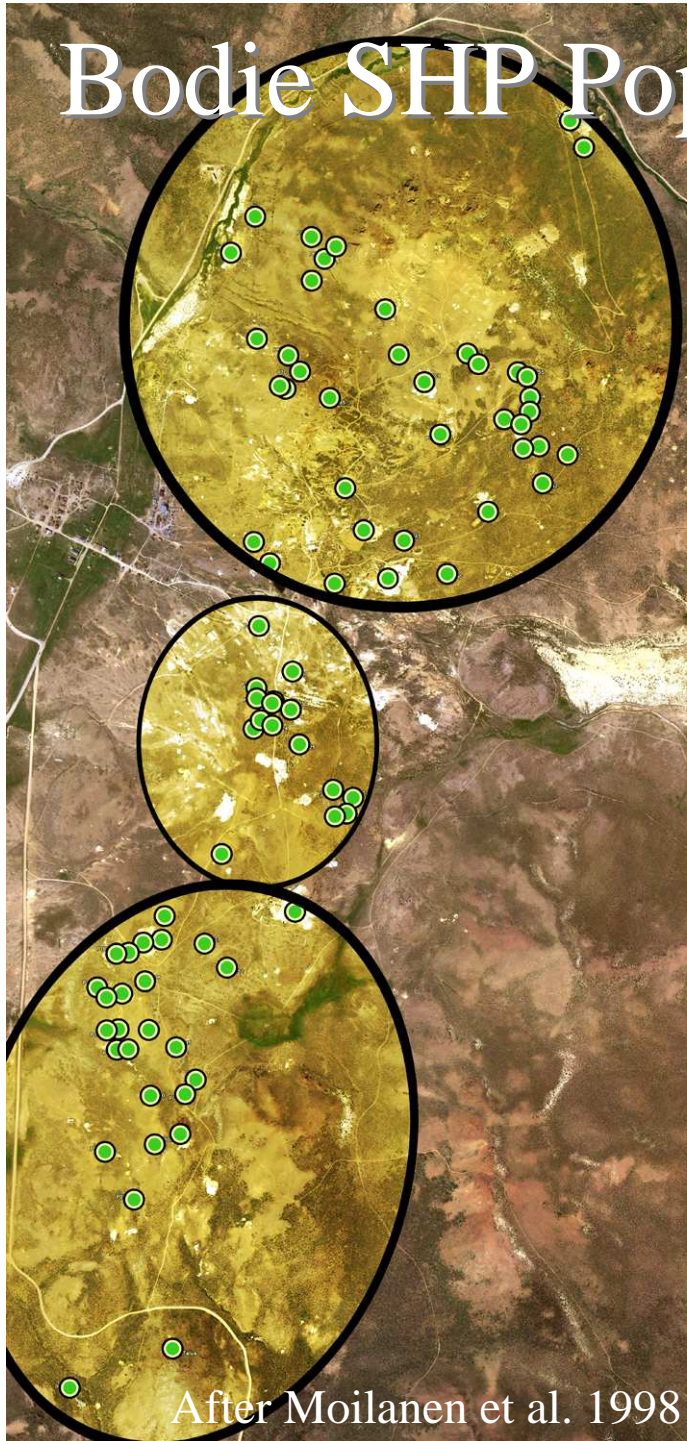


Overall Decline in Patch Occupancy at Bodie SHP

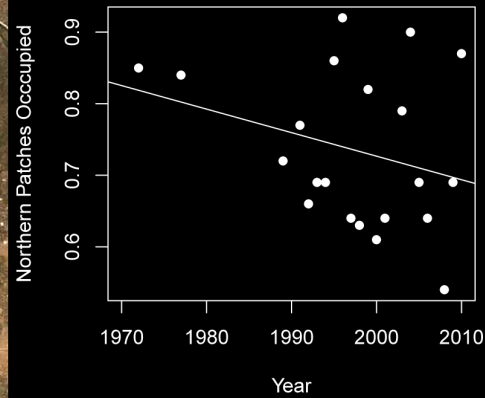


$$R^2 = 0.50, F_{1,19} = 19.11, P = 0.00033$$

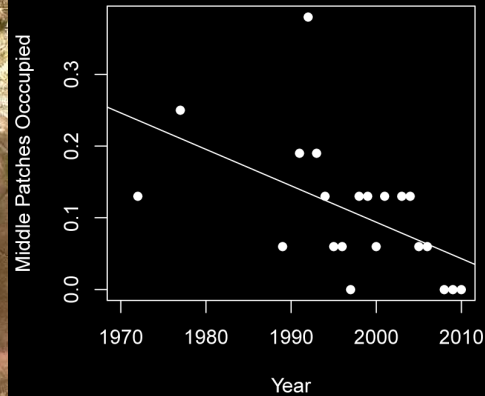
Bodie SHP Pop. Trends by Patch Network



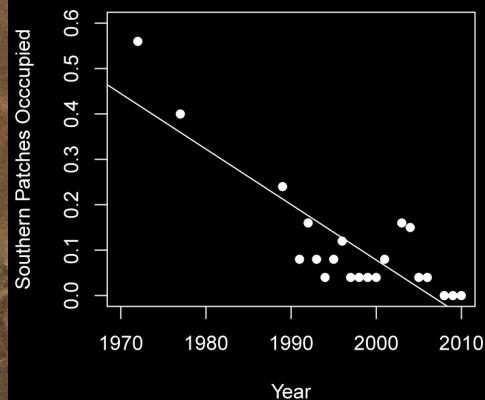
After Moilanen et al. 1998



Northern Patches:
Non-significant decline
($n = 39$, $P = 0.198$)
Without 2010 significant decline
($n = 39$, $P = 0.0692$)



Middle Patches:
Significant decline
($n = 16$, $P = 0.0133$)



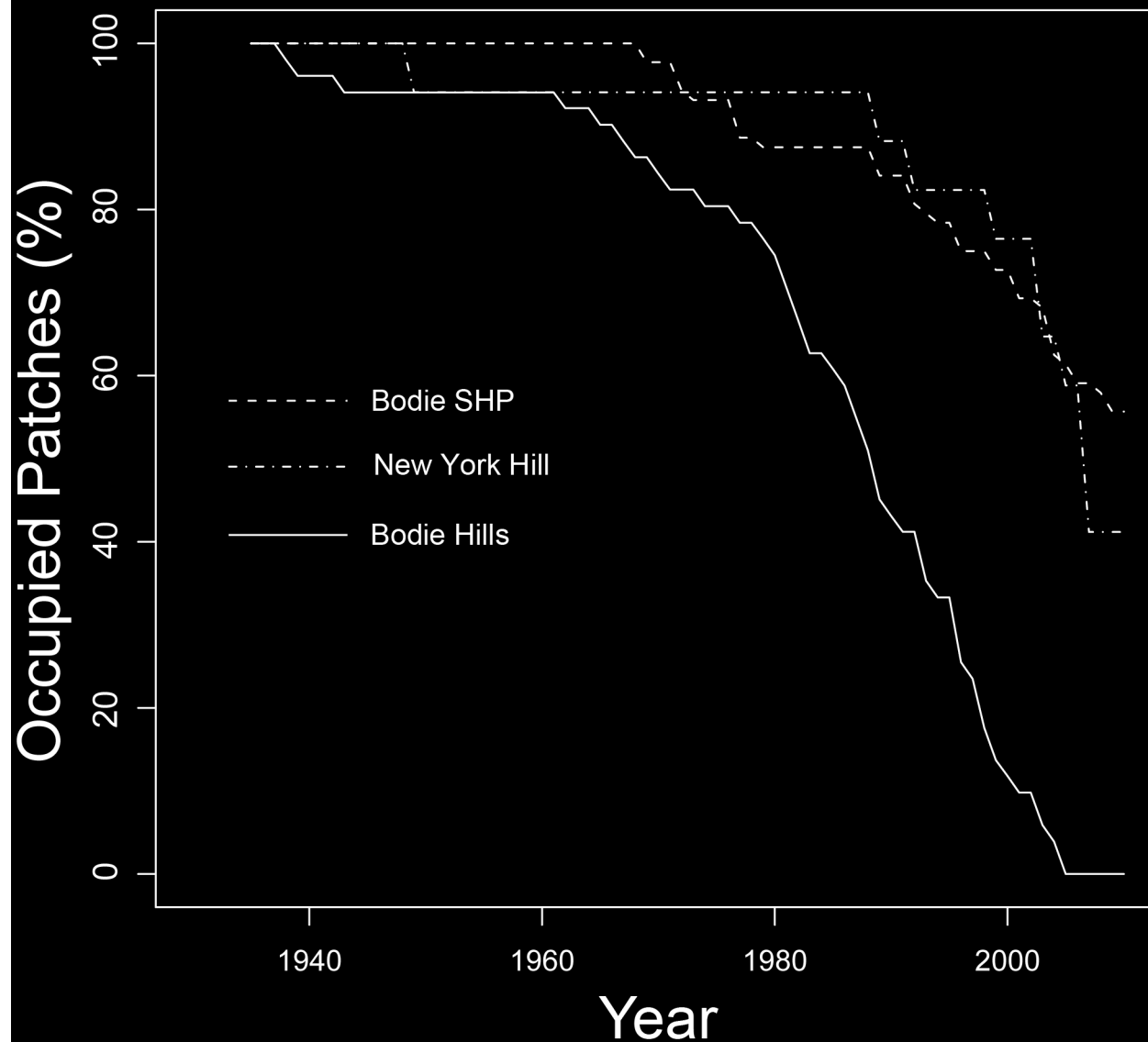
Southern Patches:
Significant decline
($n = 25$, $P = 8.70 \times 10^{-7}$)

Bodie Hills Survey (2010 data)

Three Regions Examined:

- **Bodie SHP**
 - 41% occupied and in decline
 - ~80 Anthropogenic talus patches surveyed
- **New York Hill**
 - 41% occupied and in decline
 - 17 Anthropogenic talus patches surveyed
- **Bodie Hills proper**
 - 0% occupied
 - 51 Natural talus patches surveyed

Temporal Pattern of Pika Decline in the Bodie Hills, CA



Bodie Hills curve is significantly different from Bodie SHP & NY Hill curves ($P \ll 0.001$)

Status of Bodie Hills Pikas

- Bodie Hills pika populations suffered a region-wide collapse in the late 20th century
- Two declining relict populations survive on vulnerable anthropogenic sites: **Bodie SHP** and **New York Hill**