

California Ground Squirrels - a Keystone Species in our Wildlands

Central Coast Rangeland Coalition
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Acknowledgements

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Shawn Smallwood



Goals of Today's Presentation

- Understand definition of “**keystone**” species
- Provide **natural history** of CA Ground Squirrels
- How we assess and protect **biodiversity**
- Discuss variety of **attitudes and options** for control



“preserve a rich heritage of
natural
and cultural resources”

-EBRPD Mission Statement, Master Plan 2013

What is a KEYSTONE SPECIES and why a GROUND SQUIRREL?

- Disproportionately large effect on natural environment relative to abundance
- Maintains structure of an ecological community



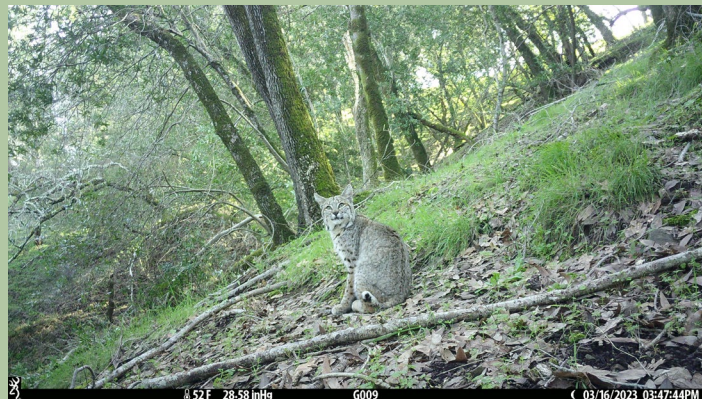
Species that Rely on Ground Squirrels for Food



Red-tailed Hawk



Badger



Bobcat



Golden Eagle

Species that Rely on Ground Squirrels for Habitat



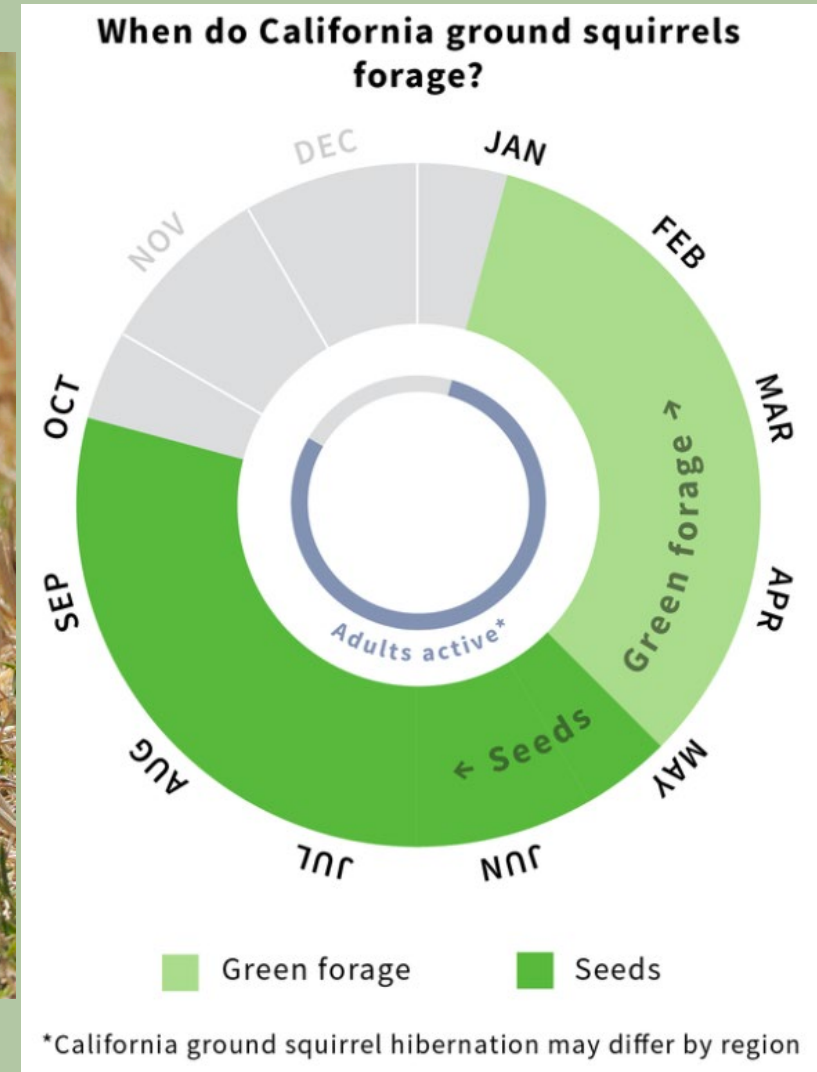
BURROWS

- Multiple entrances
- Chambers
- 6 feet deep, 35 feet long
- Satellite burrows

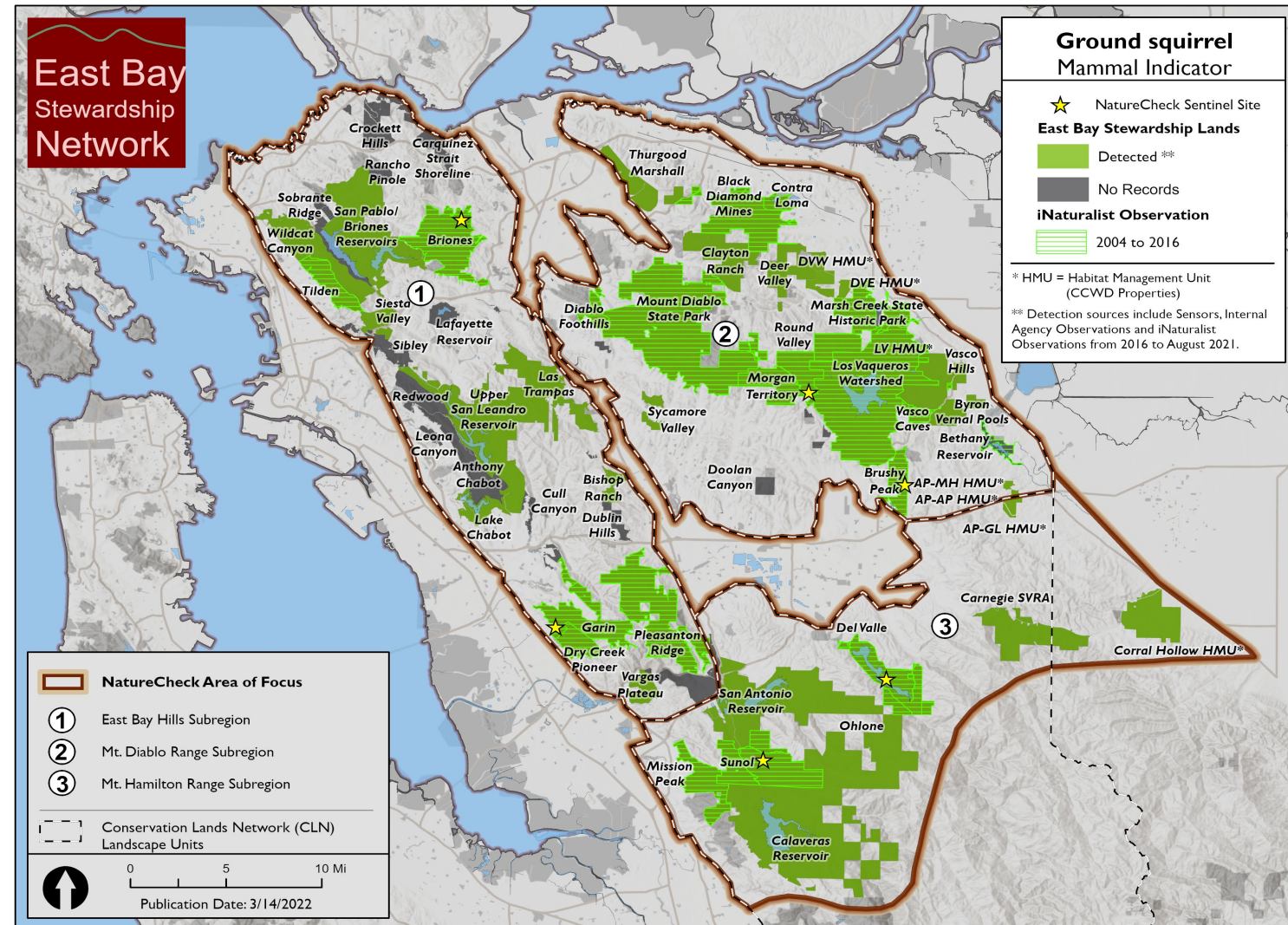


California Ground Squirrel

Otospermophilus beecheyi



Where are they Found- GRASSLANDS



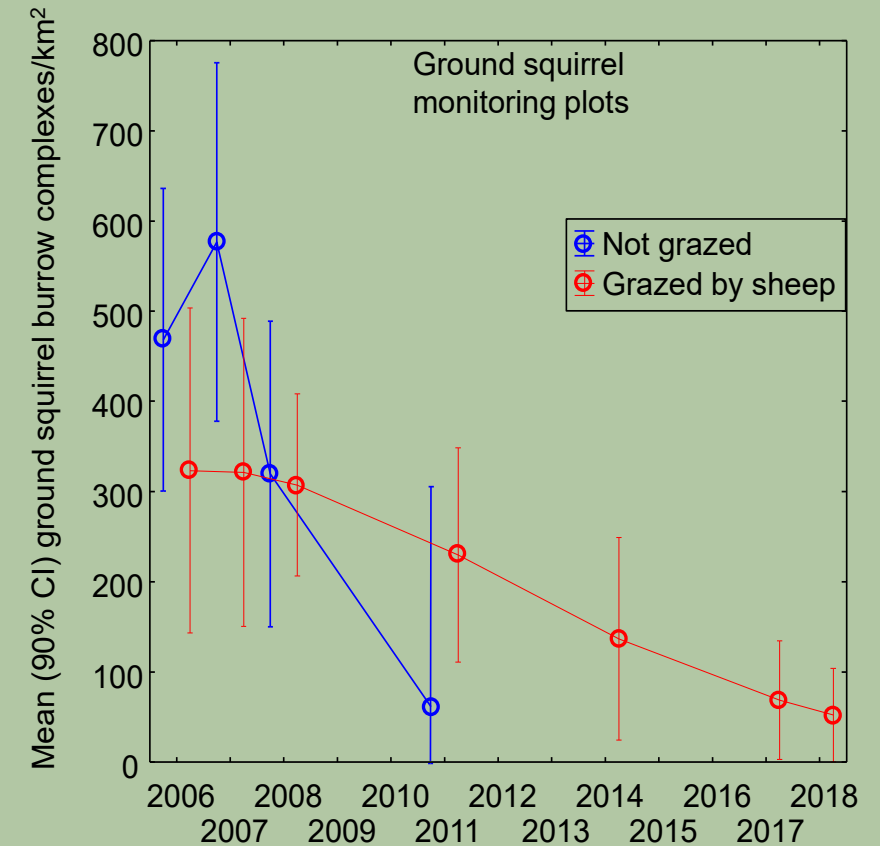
Where we WANT Ground Squirrels



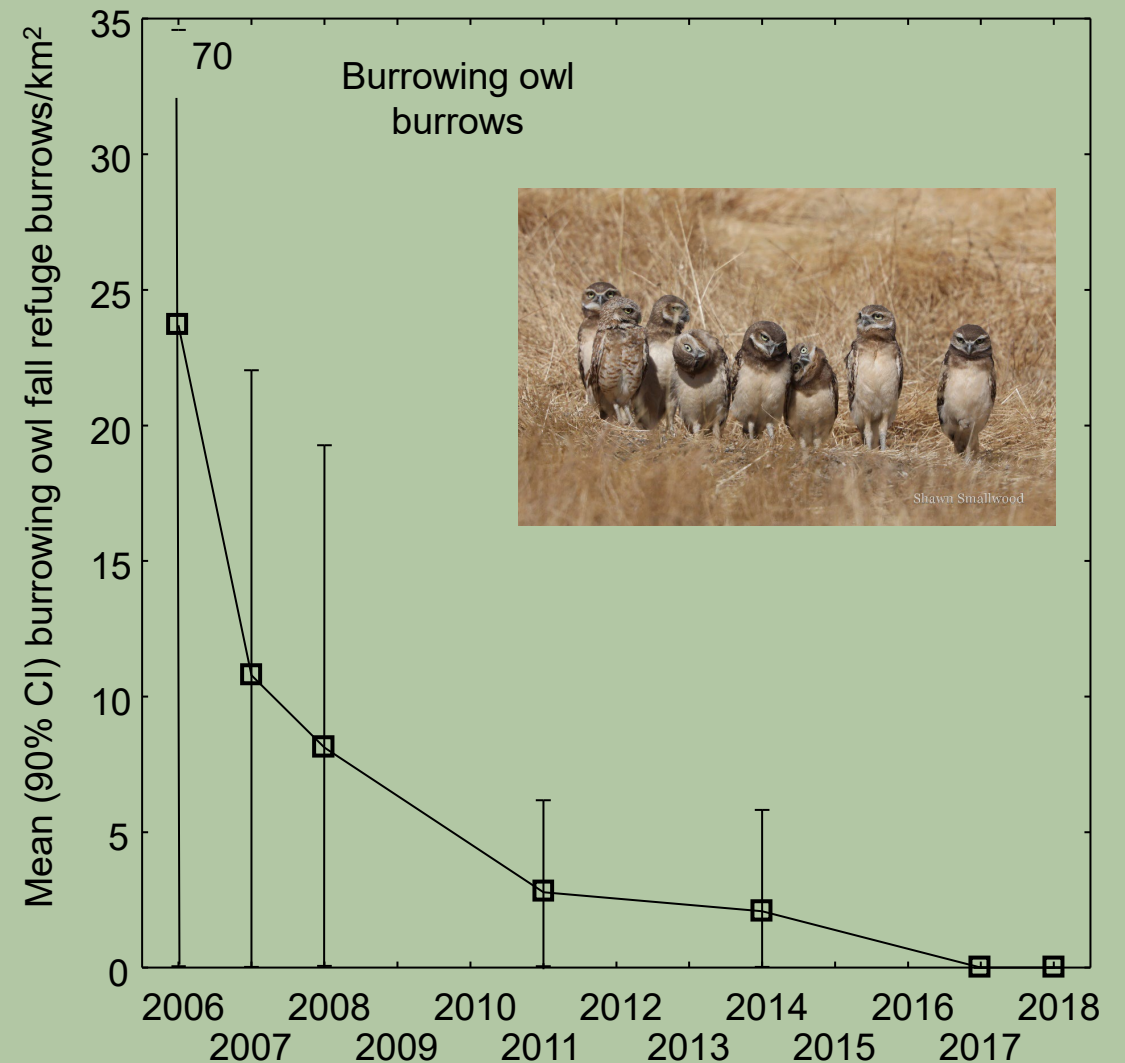
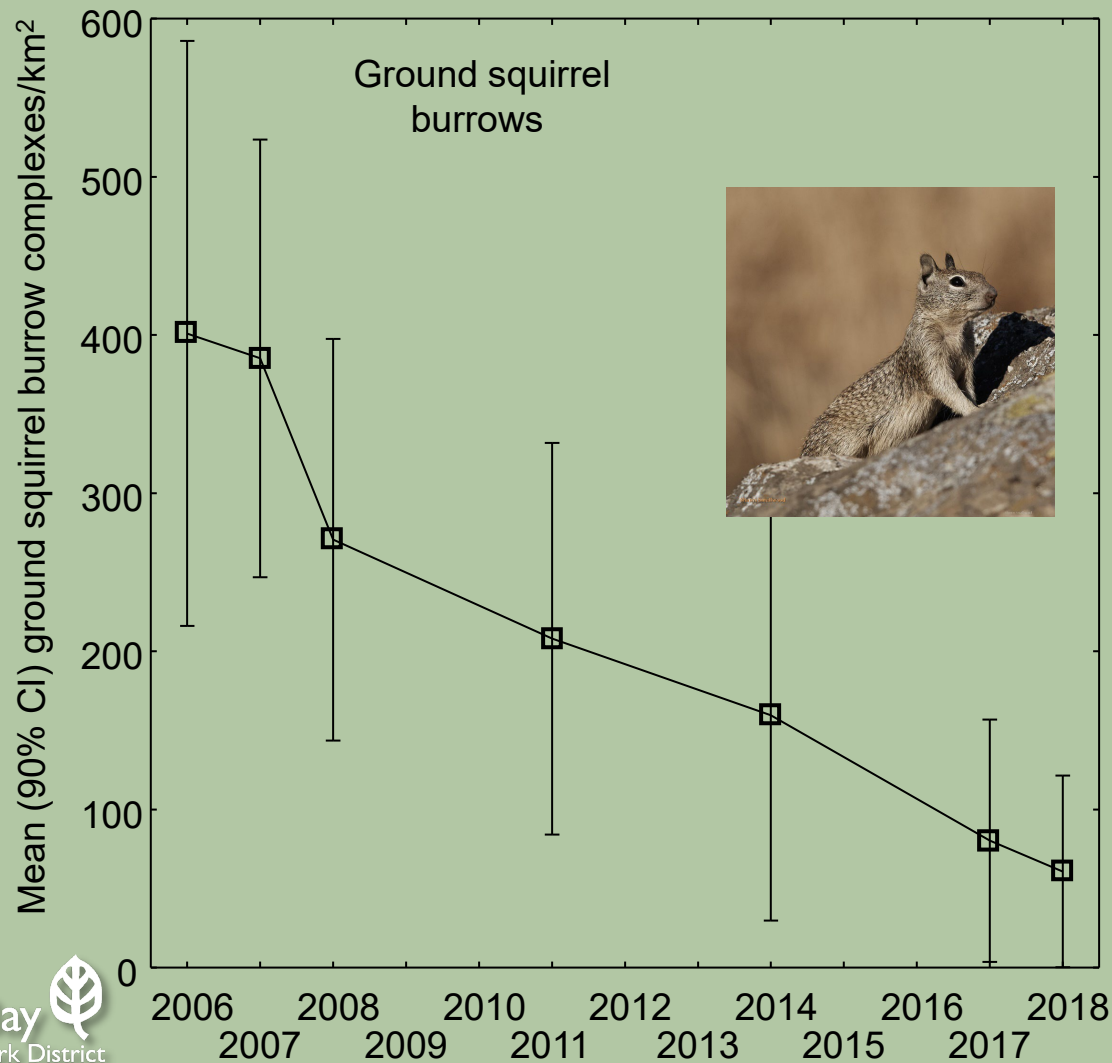
Western Burrowing Owl (*Athene cunicularia hypugae*)
Albany Bulb

Understanding & Protecting Biodiversity

Vasco Caves – 2006 - 2018



Understanding & Protecting Biodiversity

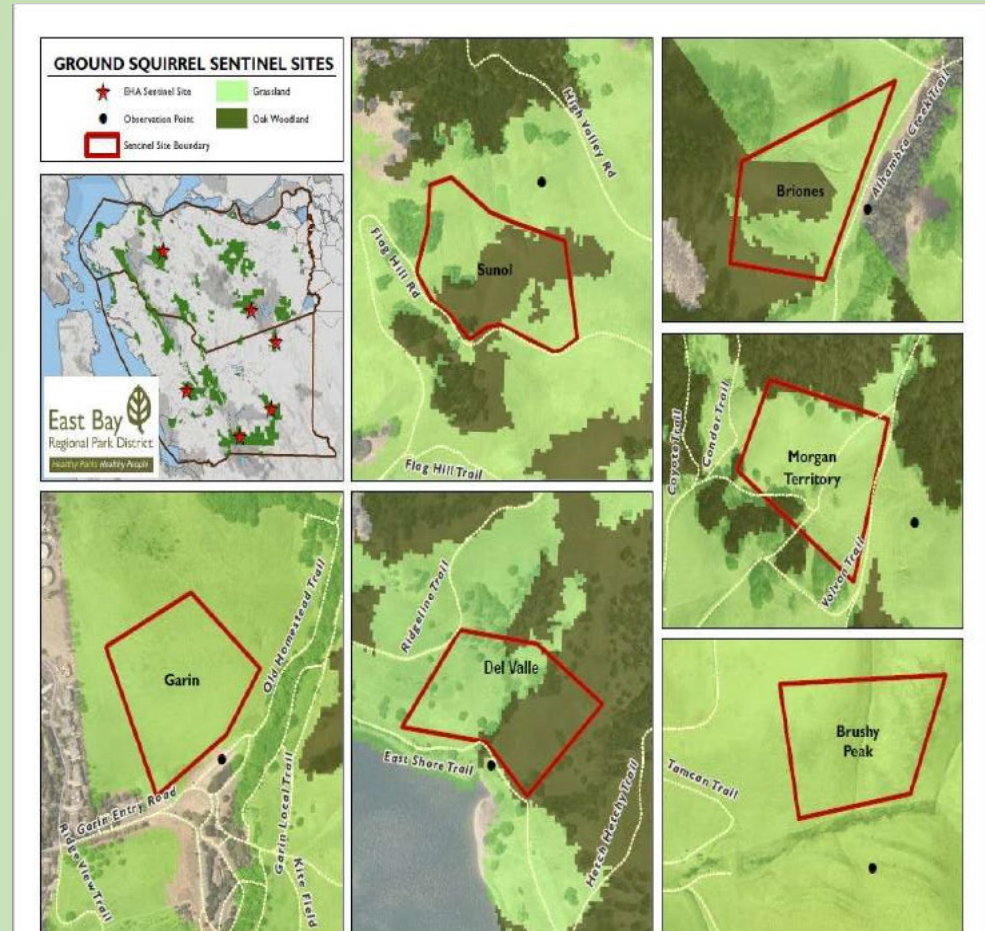
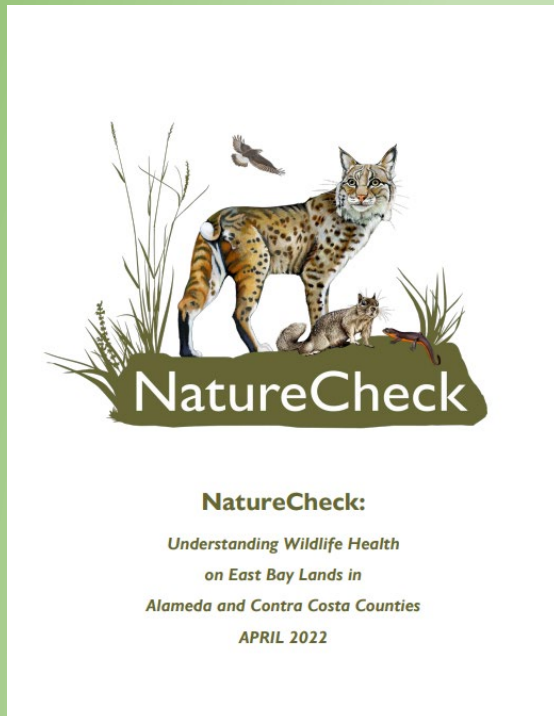


Measuring Health of Environment - Ground Squirrels as Indicator

2022 – Ground Squirrels as Indicator

2021 - 2024
Assessed Sentinel Sites

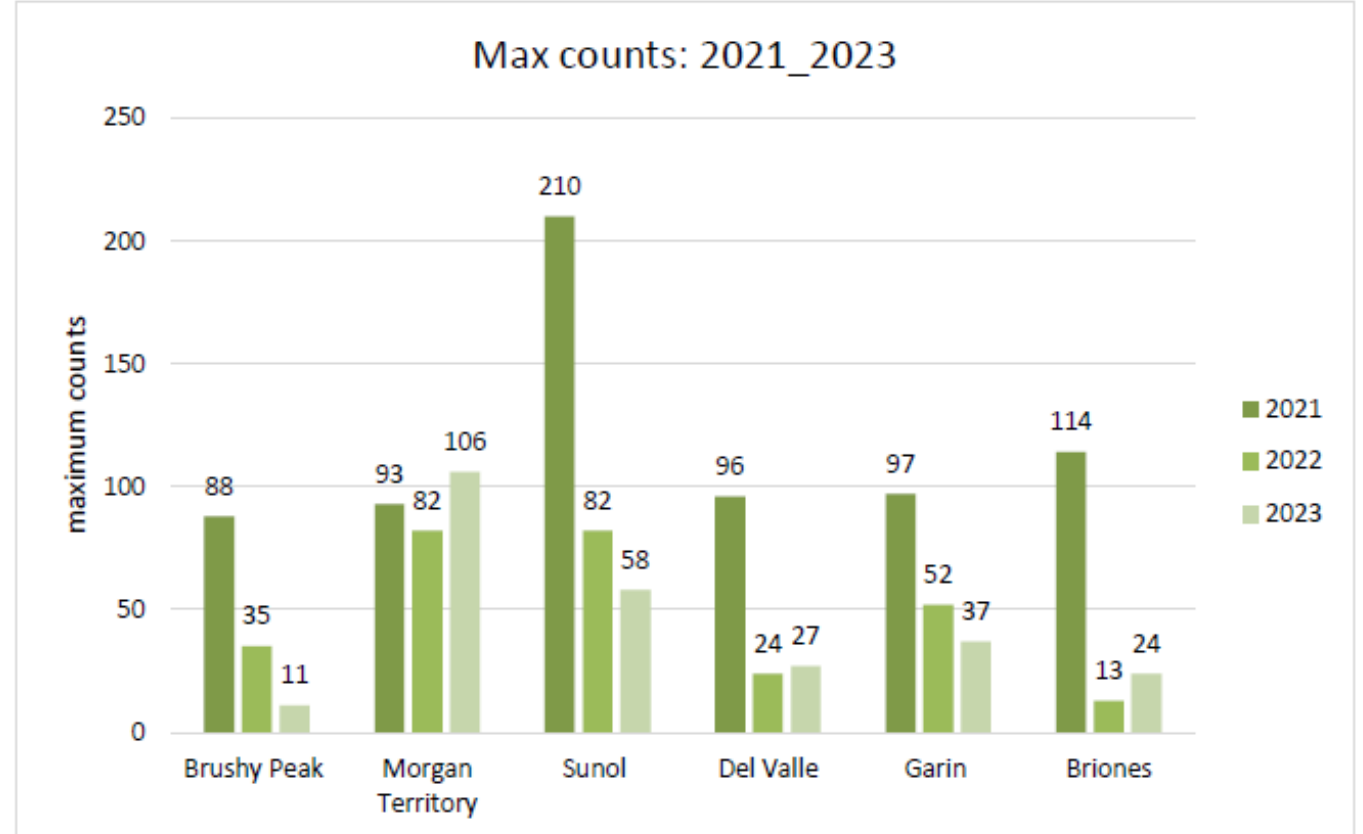
<https://www.ebparks.org/natural-resources/naturecheck>



Understanding & Protecting Biodiversity



Figure 2: Maximum counts for ground squirrels at each sentinel site for 2021, 2022, and 2023



Understanding & Protecting Biodiversity



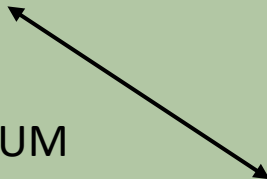
Eagle Take Permits & Mitigation



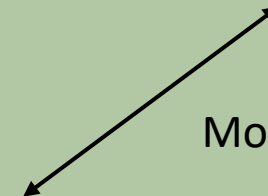
Squirrels/Eagle pair



Squirrels/AUM



Money/AUM



Controlling Squirrels where they are NOT wanted

Squirrels create infrastructure damage on levees, shorelines and irrigated turf areas
Staff time spent on addressing damage and control



Limited Control Options



- NEVER control squirrels in Wildlands
- Capture and Relocation is PROHIBITED*
- State restrictions on rodenticides
- Avoid impacts to other species
- Emphasis on Exclusion
- Understand Irrigated turf will attract squirrels

Capture and Relocation?



Translocation Model for the California Ground Squirrel
(*Otospermophilus beecheyi*) to Facilitate California Grassland
Ecosystem Recovery



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and Ronald R. Swaisgood

March 2016

Capture and Relocation is PROHIBITED*

*(for the most part)

Illegal to relocate ground squirrels in California without a permit from the California Department of Fish and Wildlife

Other control methods are needed

Education – External



NOTICE

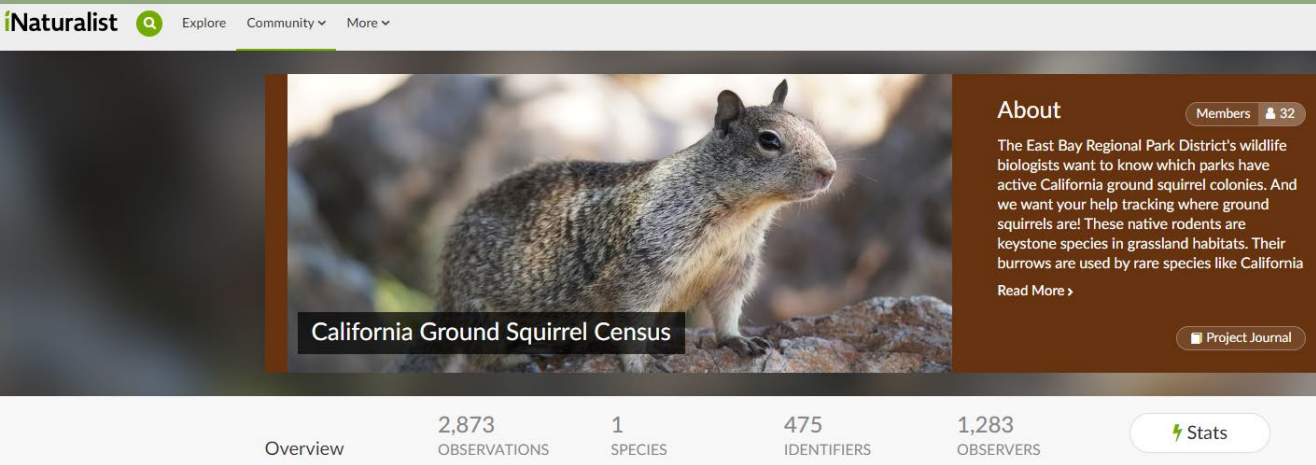
Feeding of wild or domestic animals is a violation of EBRPD Ordinance 38 and subject to fine

East Bay 
Regional Park District



Do not feed wildlife

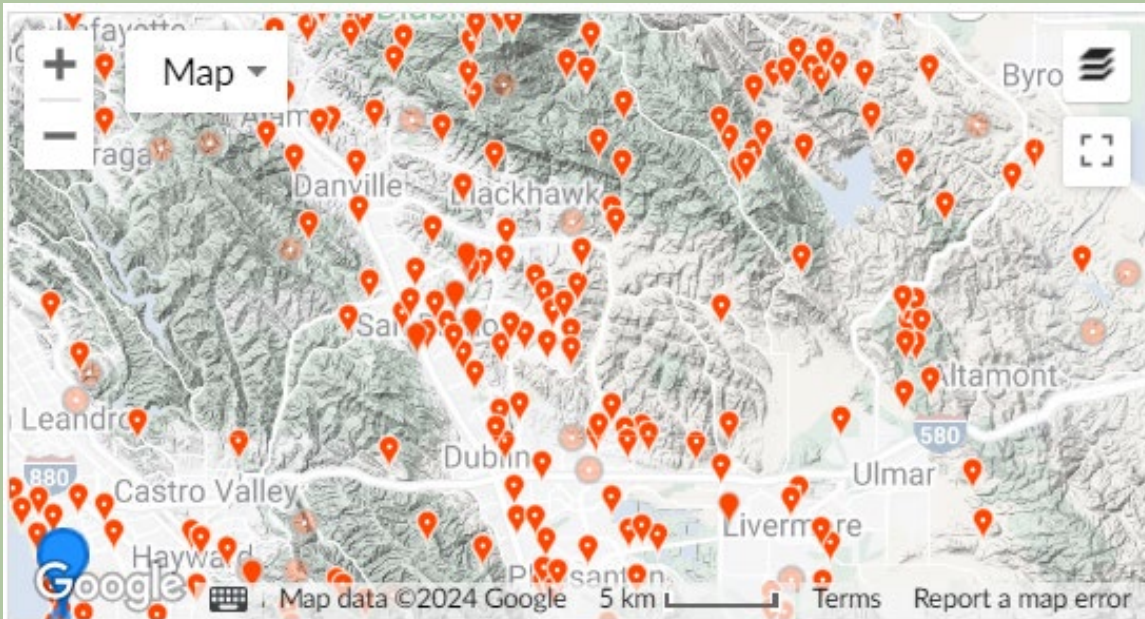
What YOU can do



California Ground Squirrel Census · iNaturalist

Use iNat to document
Burrows and Squirrels in
Parks

Adopt a New Attitude?





Thank You!

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