

Using cattle grazing as a tool to control invasive weeds

Elizabeth Reikowski

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San Benito County Weed Management Area
22nd Annual Continuing Education Seminar for Ranchers

Willow Creek Land and Cattle

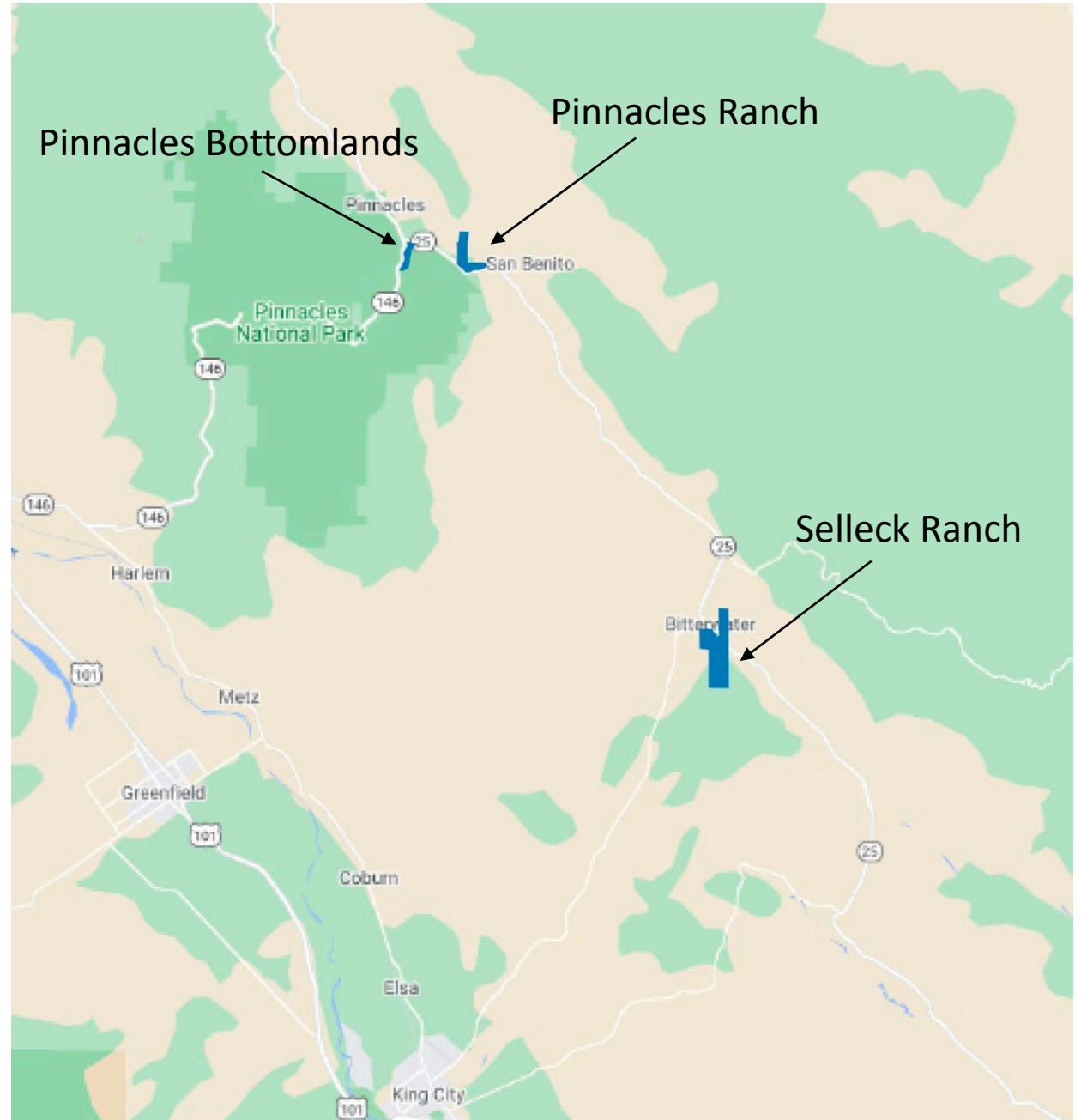
- Graze two leased ranches in south San Benito County
- Grazing contract at Pinnacles National Park



Matt Reikowski



Blake Duncan





Overview

❖ Common weeds in San Benito County

❖ Methods

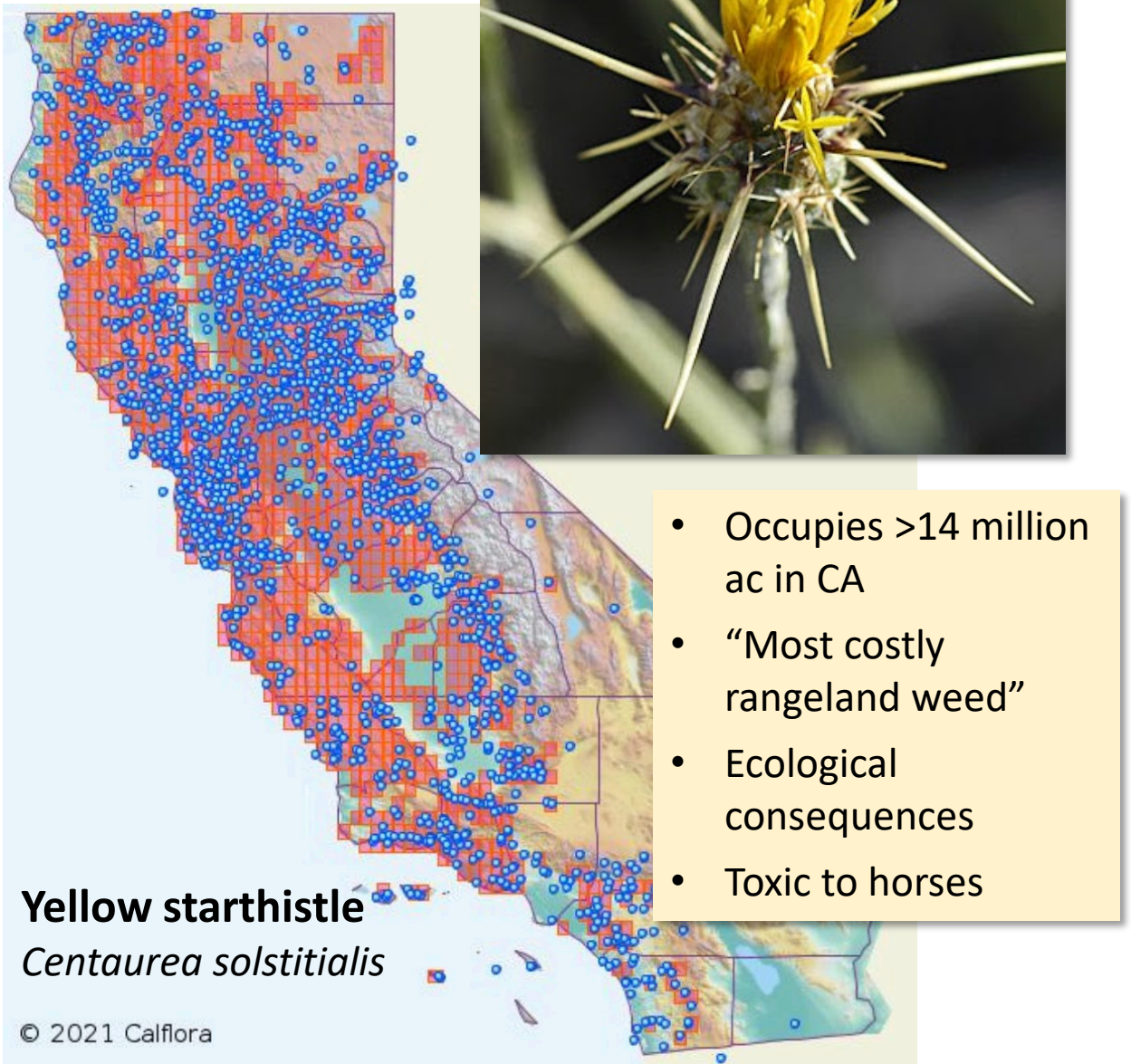
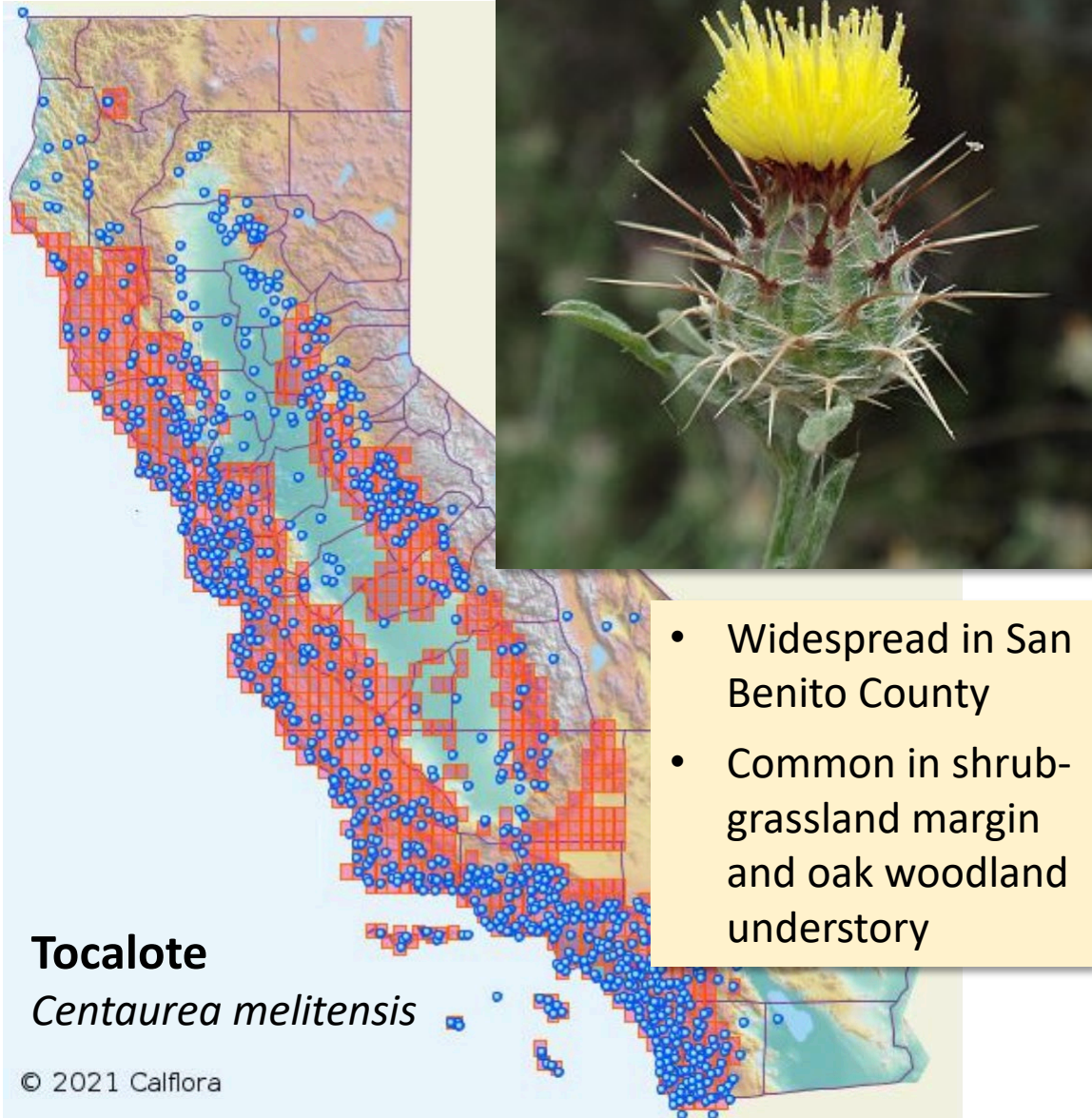
- How to use livestock to control weeds

❖ Examples

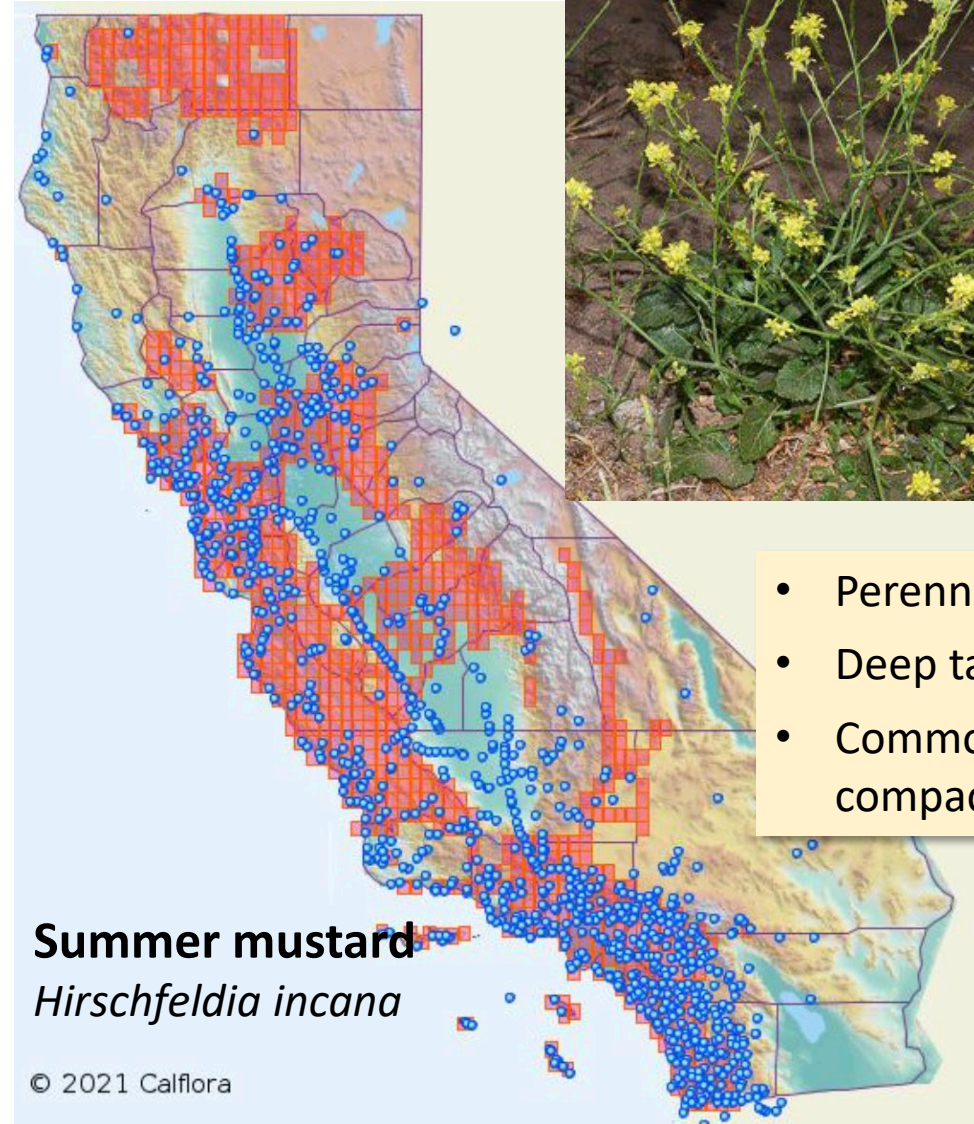
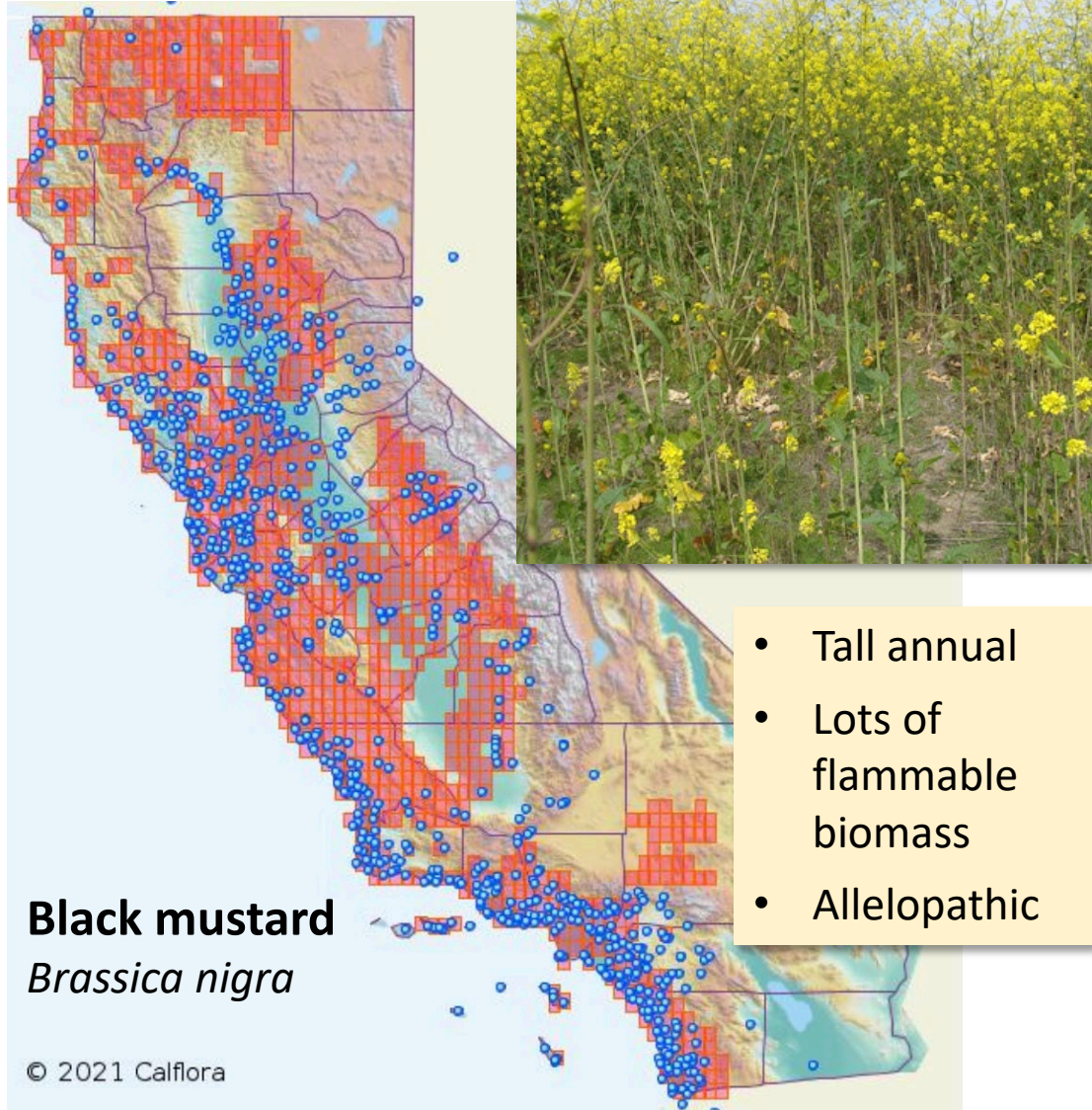
- SARE project
- Pinnacles Prairie Restoration Project



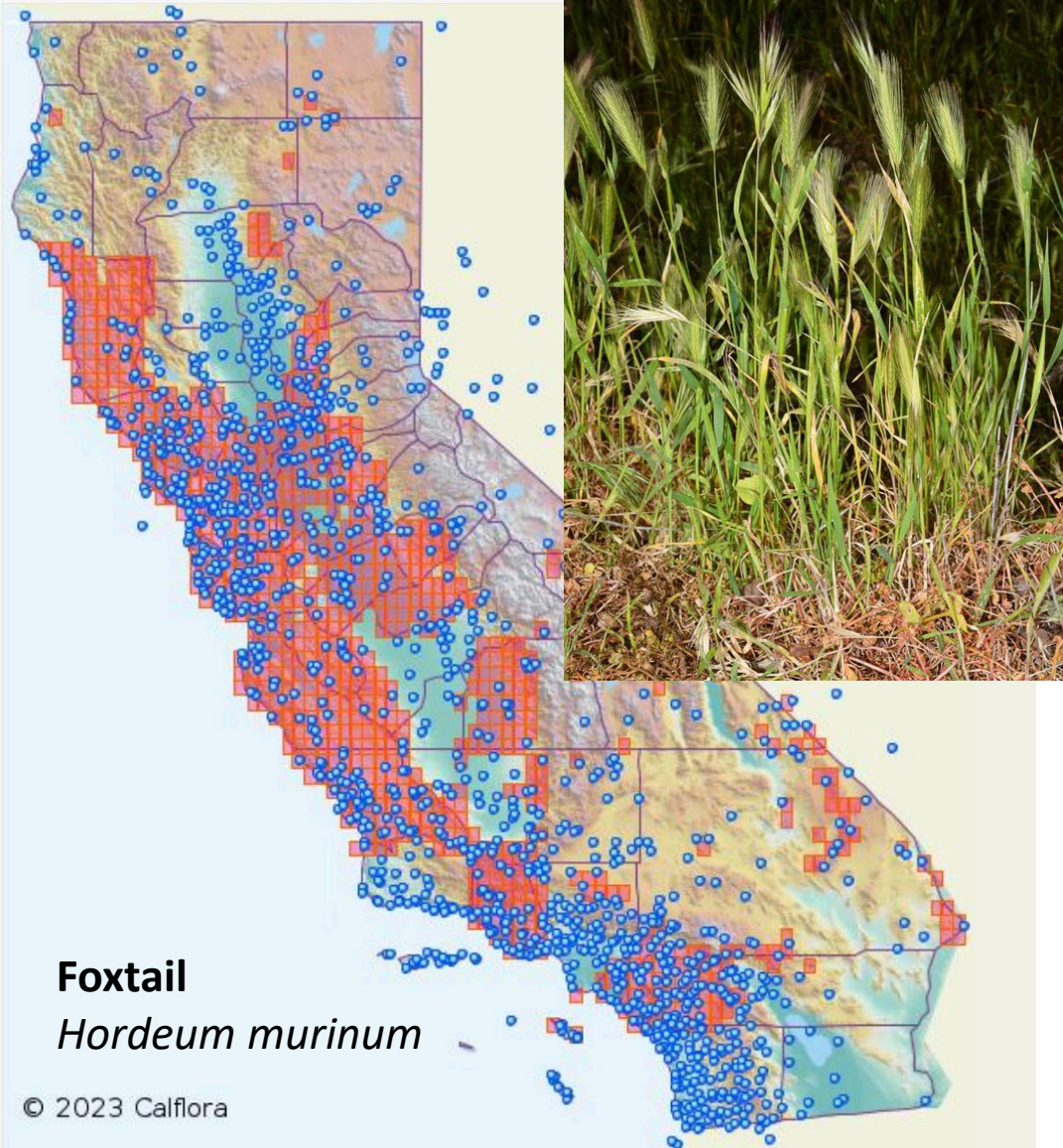
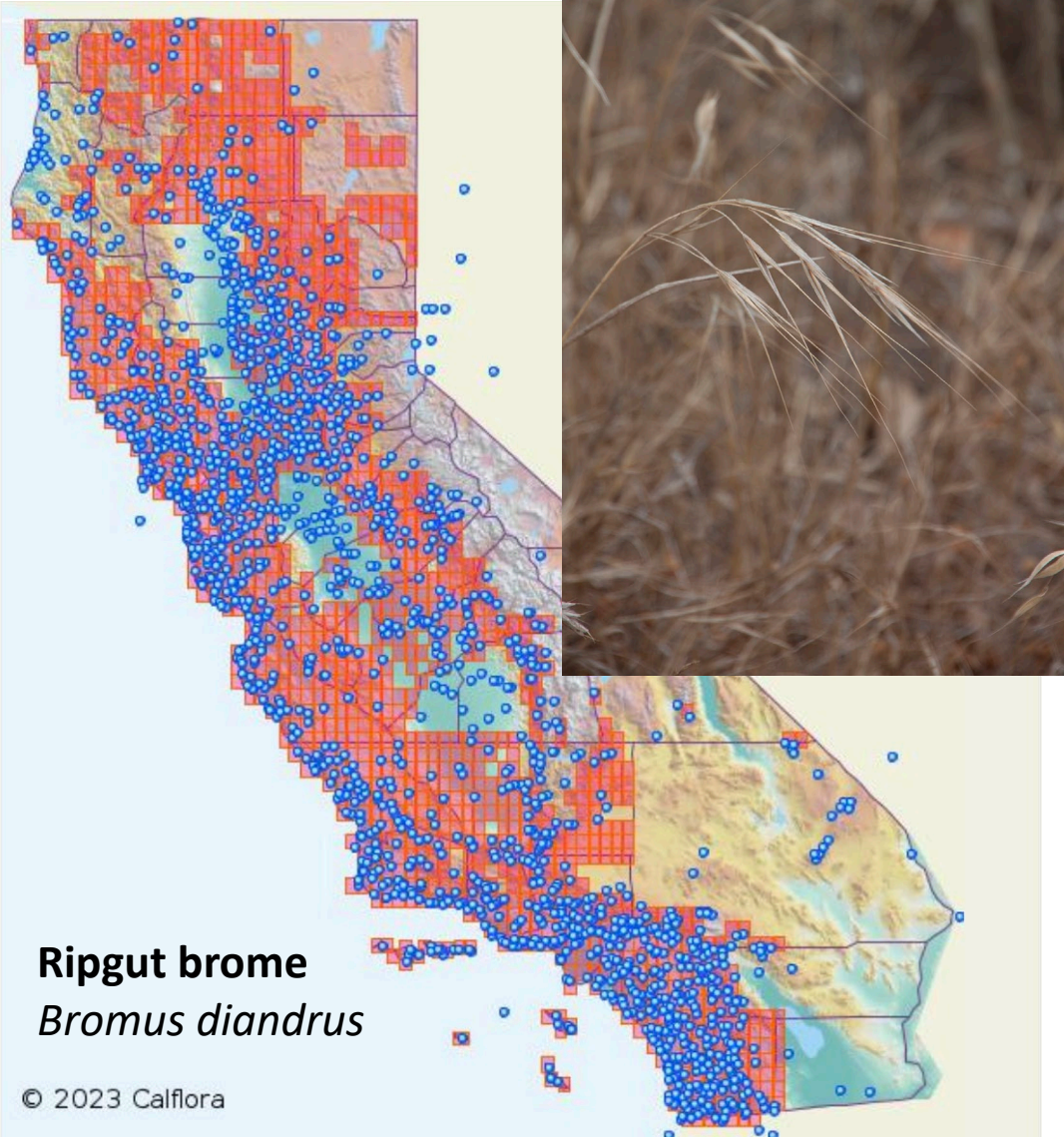
Starthistles (*Centaurea* species)



Mustards (Brassicaceae)



Grasses



Using livestock to control weeds

- ❖ Consumption

- ❖ Trampling

- ❖ Indirect effects

- ❖ Creating conditions that favor desirable plants rather than the weed



Consumption

(livestock eat the weed)

❖ What species will eat the weed?

- Cattle and horses – grasses
- Sheep – forbs
- Goats - brush

❖ When will the weed be the most palatable?

- Earlier in its life

❖ When will the weed be the most sensitive to grazing?

- When it's trying to reproduce



When to graze?

Yellow Starthistle Life Cycle

- Nutrition tends to decline as plants get older
- Plants are protected from grazing during rosette lifestage



Seedling



Rosette

Best nutritional value
(Highest digestible protein)



Bolting Stage

Okay nutrition and more
accessible to herbivores



Flowering

Best life-stages for grazing

Starthistle: Bolt



Mustard: Bolt or flower



Higher stock density causes reduced selectivity



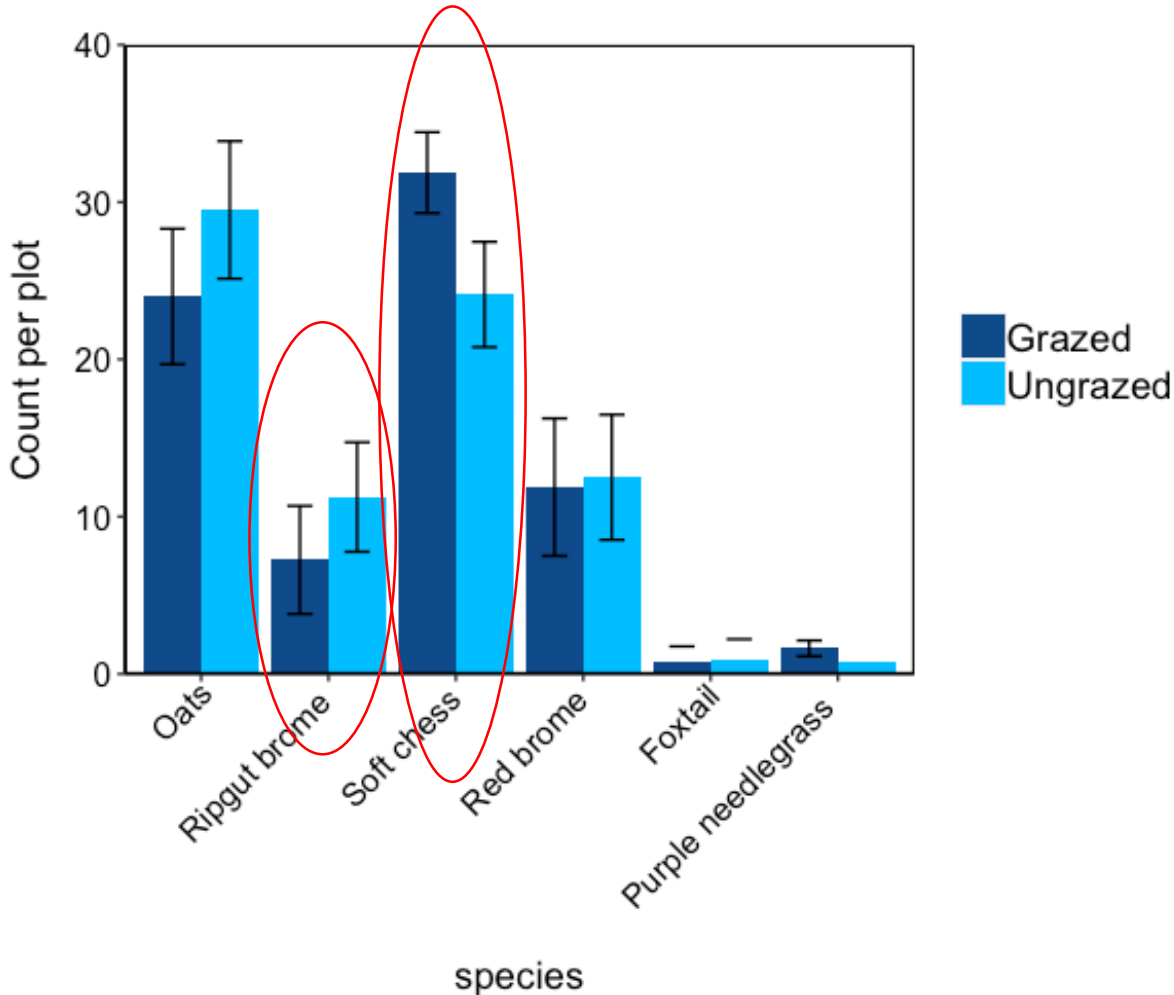
Trampling

- ❖ Good tool for unpalatable weeds
- ❖ Larger animals are better (cows)
- ❖ Need high stocking density
- ❖ Caution
 - Bare ground
 - Soil compaction



Indirect effects

❖ Creating conditions that the weed doesn't like



SARE project enclosure at the Selleck Ranch; purple needle grass in the foreground



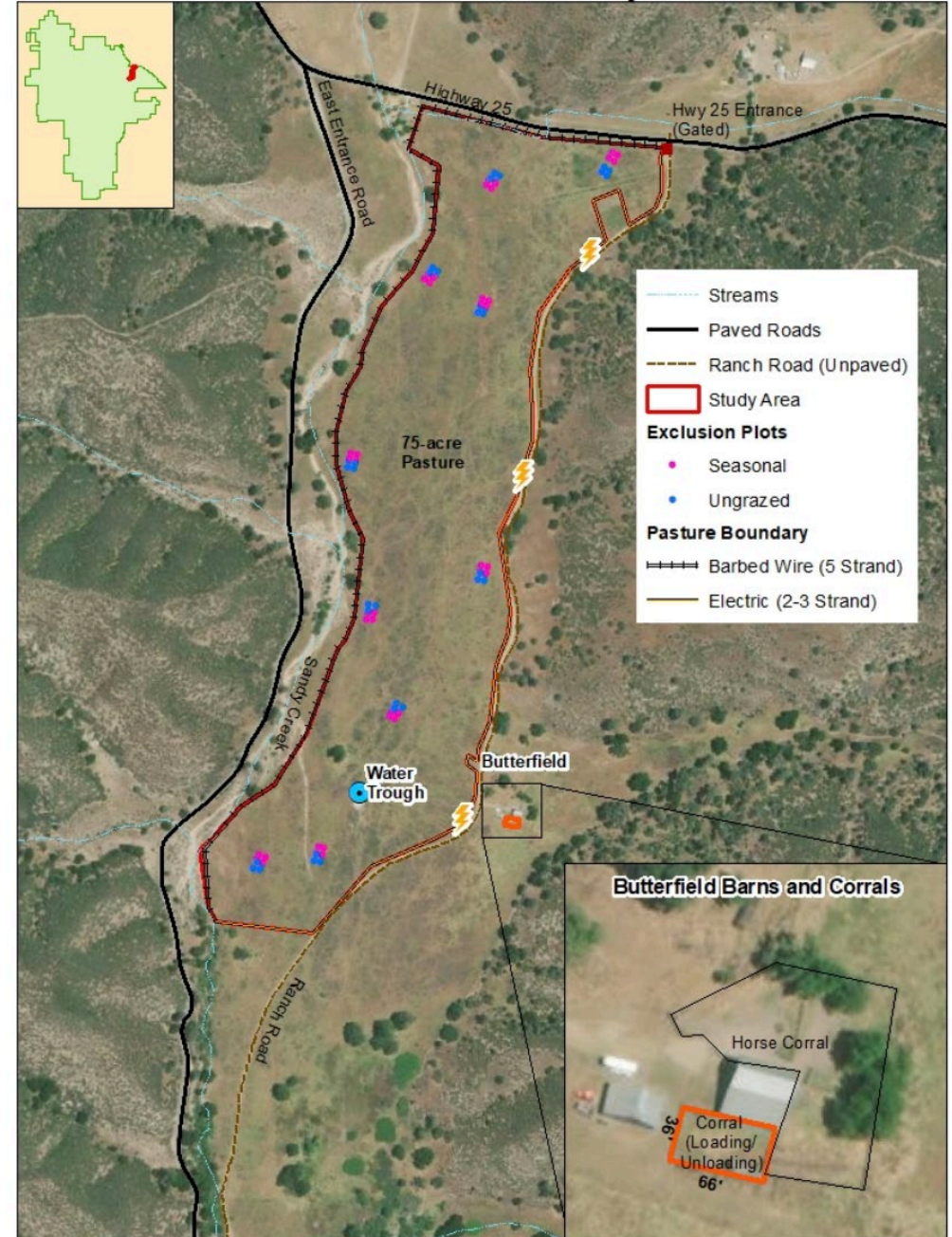
Thatch



Prairie restoration project at Pinnacles National Park



Pinnacles NP Prairie Project Area

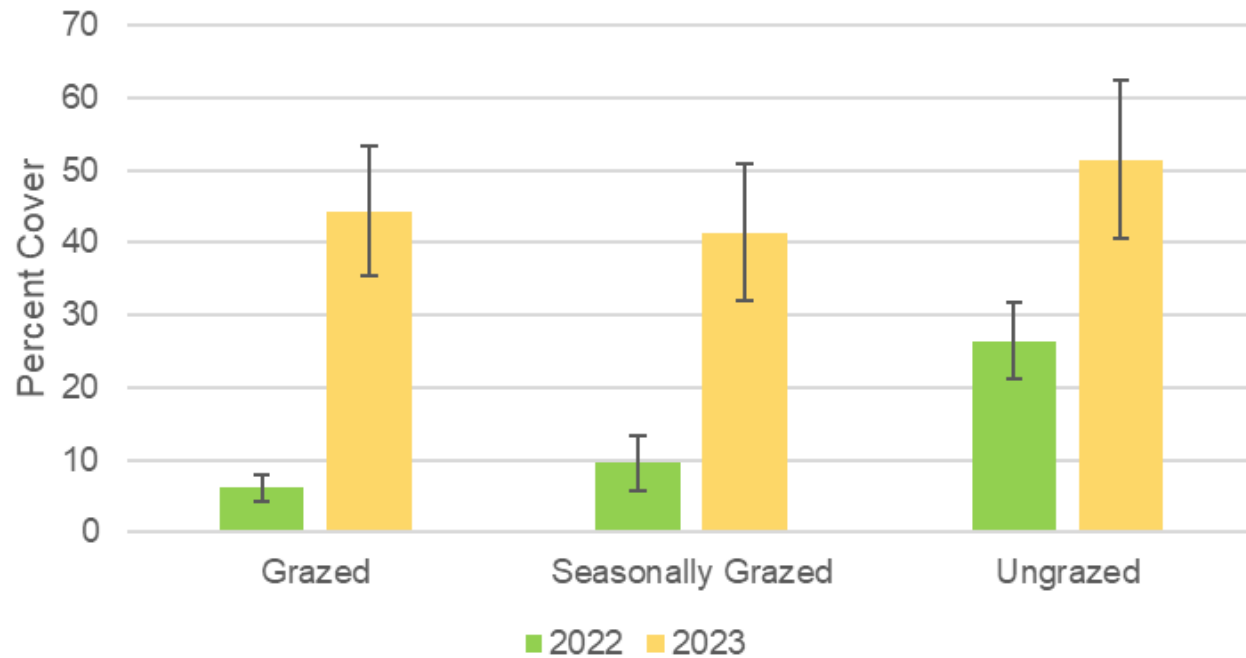


Pinnacles Prairie Restoration

- ❖ Two grazing sessions per year
 - ❖ December – January
 - ❖ April/May - July



Summer Mustard Canopy Cover



Concluding thoughts

- ❖ Experiment, observe, and adapt
- ❖ “Safe to fail” experiments
- ❖ Adapt practices over time and in response to annual conditions



Questions?

ereikowski95@gmail.com
(831) 902-9512

