

A vibrant yellow flower with a dark center is in sharp focus in the lower-left foreground. The background is a lush green field with various plants and flowers, extending to a line of trees under a cloudy sky. A semi-transparent grey box is overlaid on the upper half of the image, containing the title text.

Enhancing habitat diversity and functionality with conservation grazing in Coast Salish prairies and wetlands

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Pacific Northwest Prairies

History:

- Formed by retreating glaciers
- Gravelly, well-drained, low nutrient soils
- Maintained by indigenous burning and food harvests
- Host several rare, threatened and endangered species



PNW Prairie Rare Species



Ecological and economic benefit-cost comparison of grazed and ungrazed prairie land for critical species protection in western Washington

Partners:

Ecostudies Institute

Washington State University – Vancouver

Washington State University – Extension

Natural Resources Conservation Service

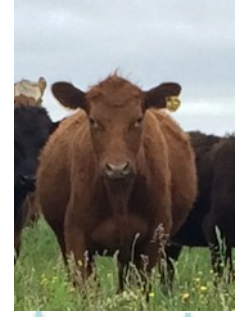
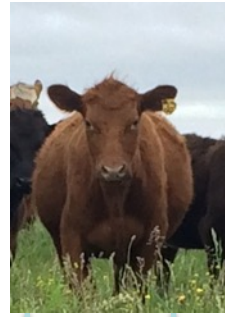
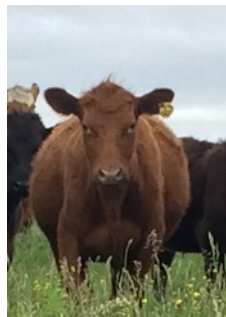
Colvin Ranch

Fisher Ranch

Riverbend Farm



Conservation Grazing Practices (CGP)



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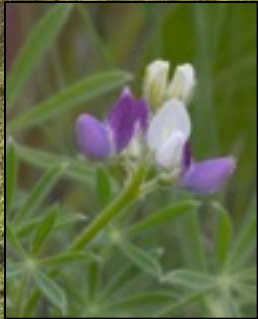
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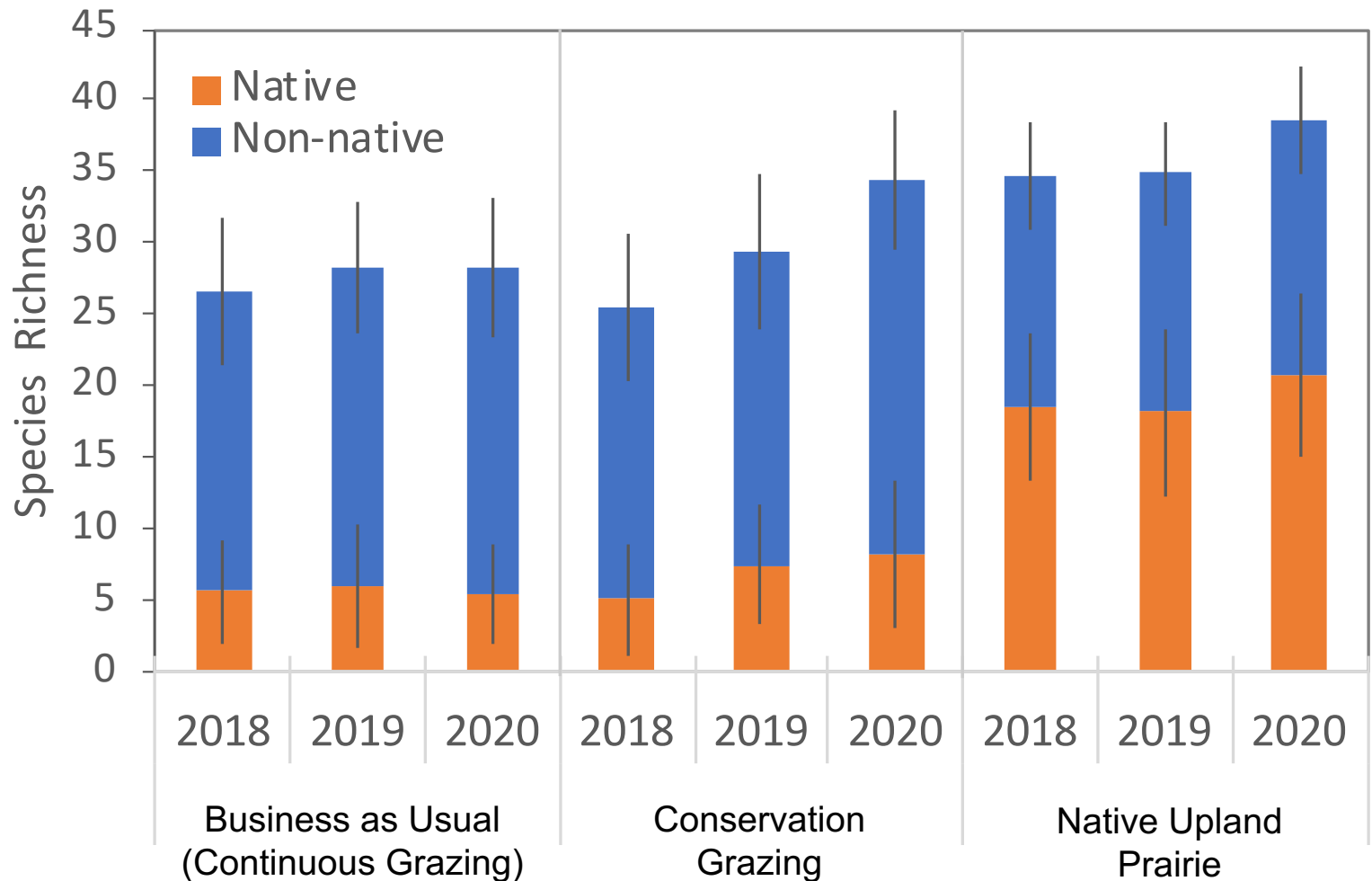
Sustainably graze,
moving cattle
frequently.
Maintain stubble
height ~3"

'Rest' pastures,
completely
removing cattle
while native plants
bloom and set seed

Sustainably graze,
moving cattle
frequently. Maintain
stubble height ~3"
Seed native species



Grazing impacts on species richness

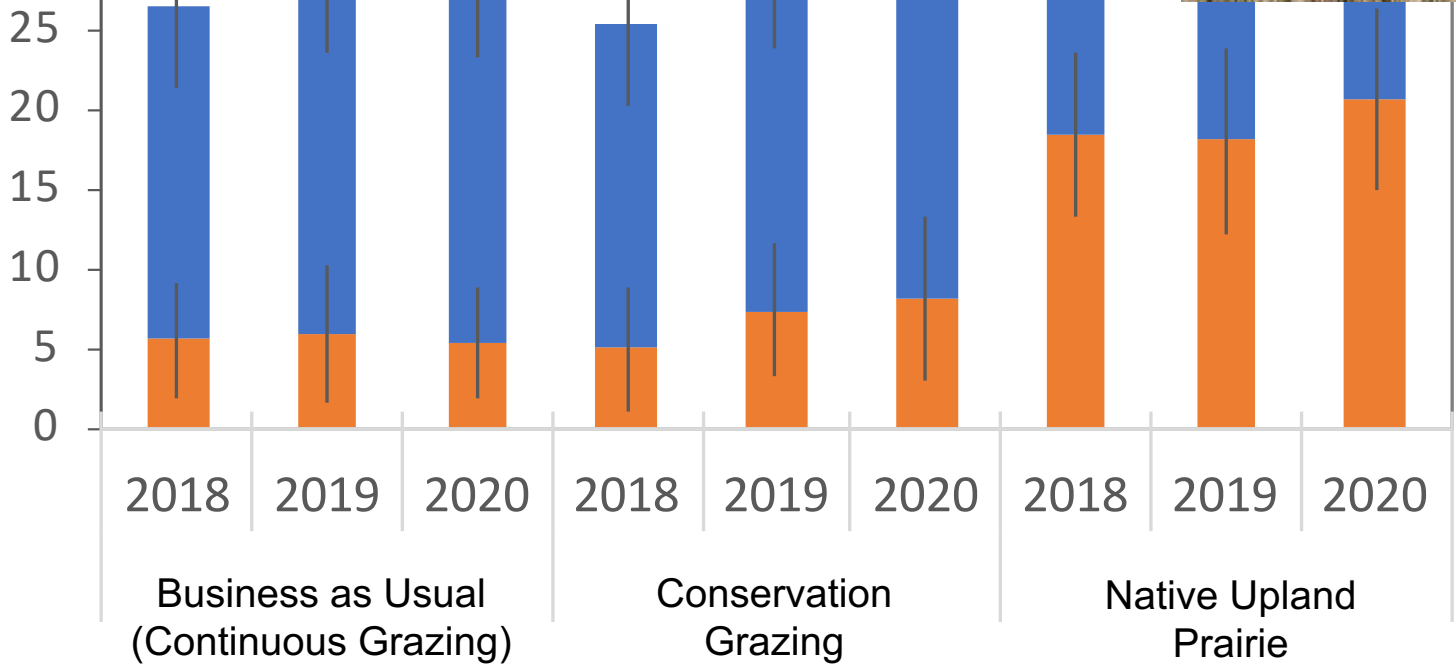


Grazing impacts on species richness

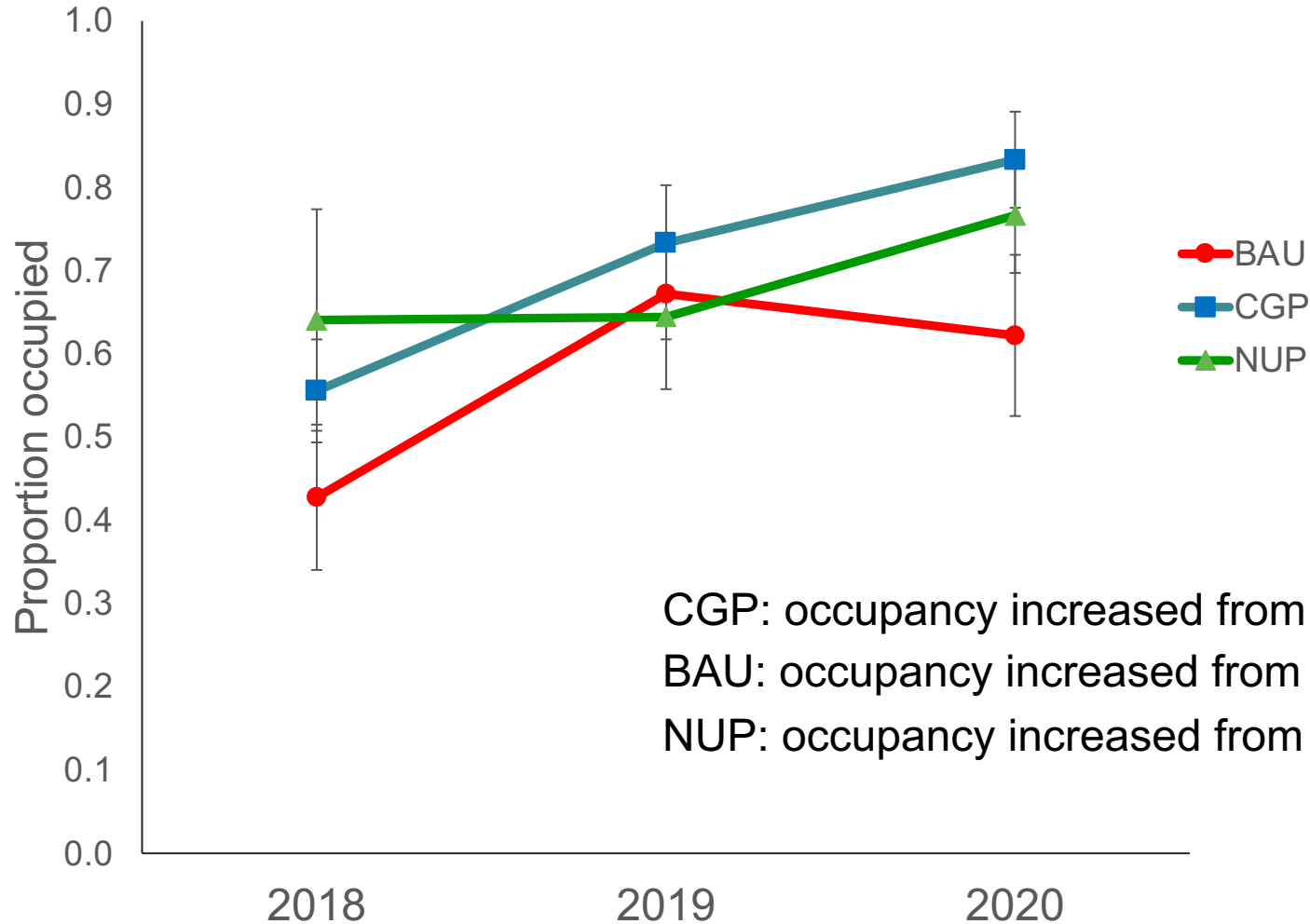


Native

Species Rich



Gopher occupancy



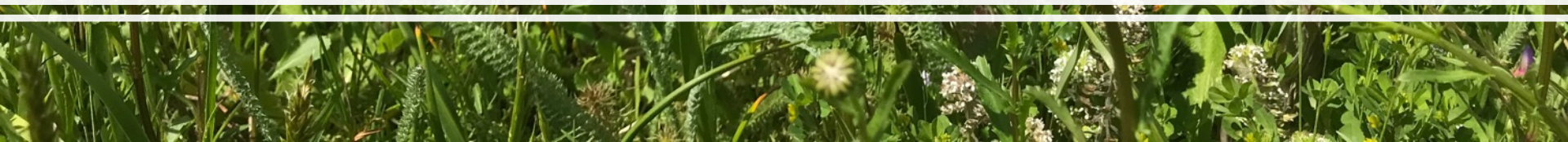
CGP: occupancy increased from 55% to 80%

BAU: occupancy increased from 40% to 55%

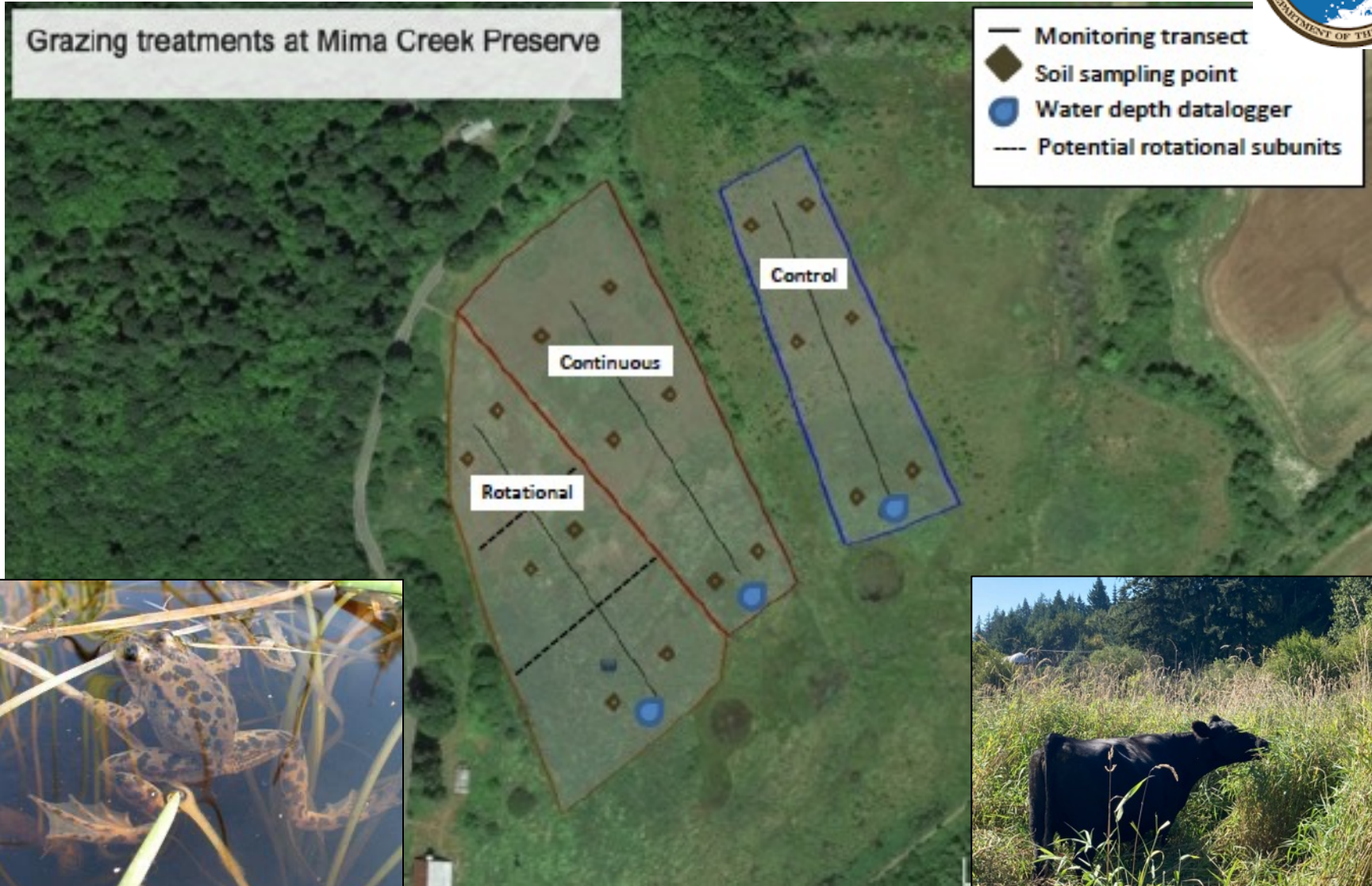
NUP: occupancy increased from 65% to 75%



Golden paintbrush (*Castilleja levisecta*)
Federally threatened species



Grazing for Oregon spotted frog habitat



Grazing for Oregon spotted frog habitat

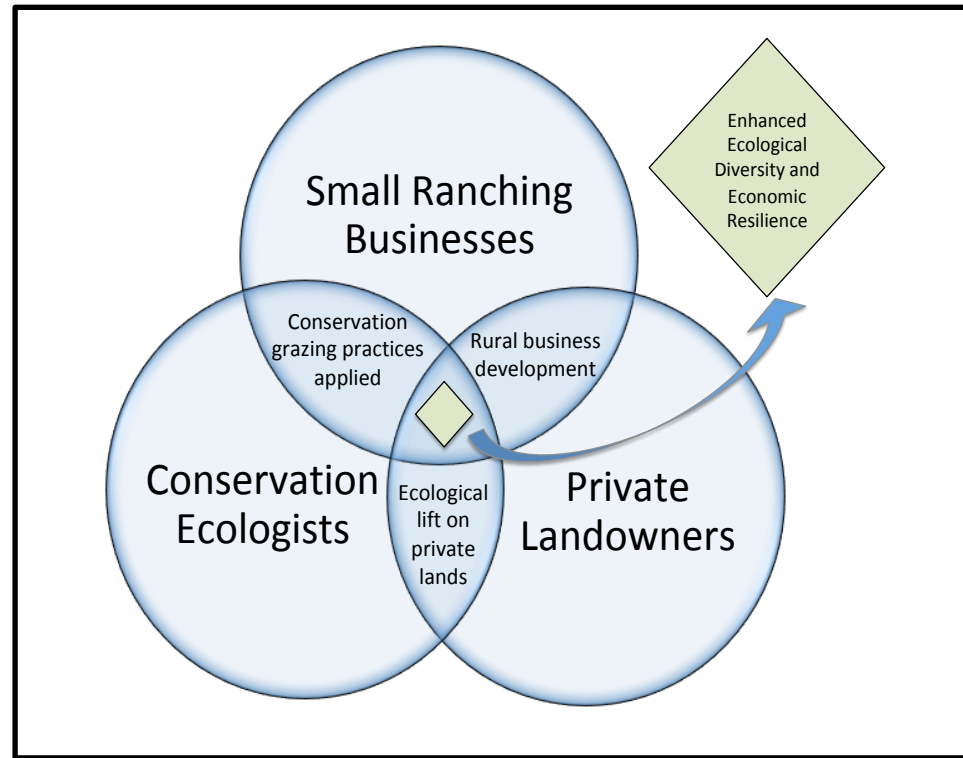
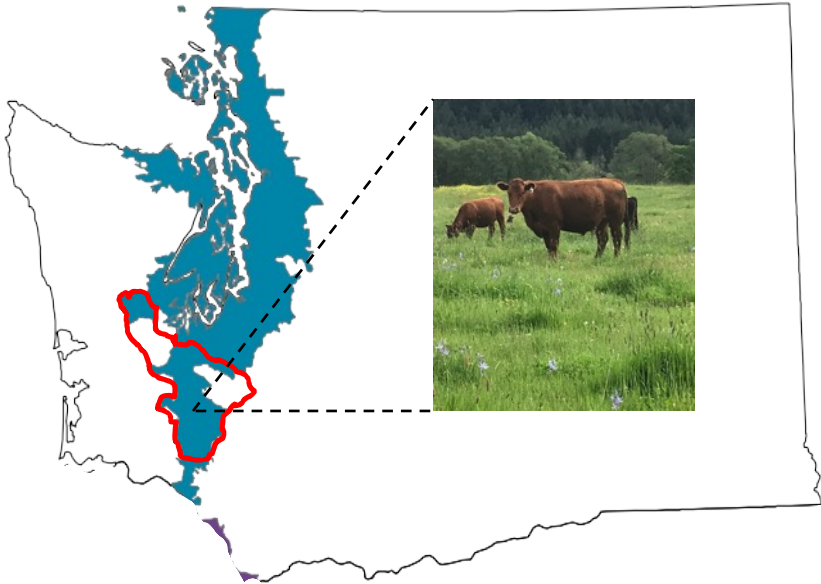


- No major impacts on water quality
 - DO, fecal coliform bacteria, total P
- Water depths have increased in both treatments
- OSF egg masses have increased 10x since grazing treatments began

- Both grazing treatments reduce thatch depth
- Grazing created ideal vegetation heights for oviposition periods
- Rotational grazing reduced native plants more than Continuous grazing



Enhancing biodiversity of prairie habitat and economic resilience of rural communities through conservation grazing



Partners:

Ecostudies Institute

Center for Natural Lands Management

U.S. Fish and Wildlife Service

Washington State University-Extension

Thurston Conservation District

Lewis Conservation District

Natural Resources Conservation Service

Tracking Y Ranch

Washington State Department of Veterans Affairs

Funding: Washington Coast Restoration & Resiliency Initiative

Tracking change in plants, pollinators & avian communities



Conclusions

- Conservation grazing practices can increase native and overall species richness within three years
- Conservation grazing can be used to promote habitat for rare and endangered species like the Mazama pocket gopher and the Oregon spotted frog
- Think beyond the 'preserve' model for conserving rare species and habitats



Thank you!

For more information:
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www.cascadiaprairieoak.org

Visit SW Washington Grazing Association on FB!