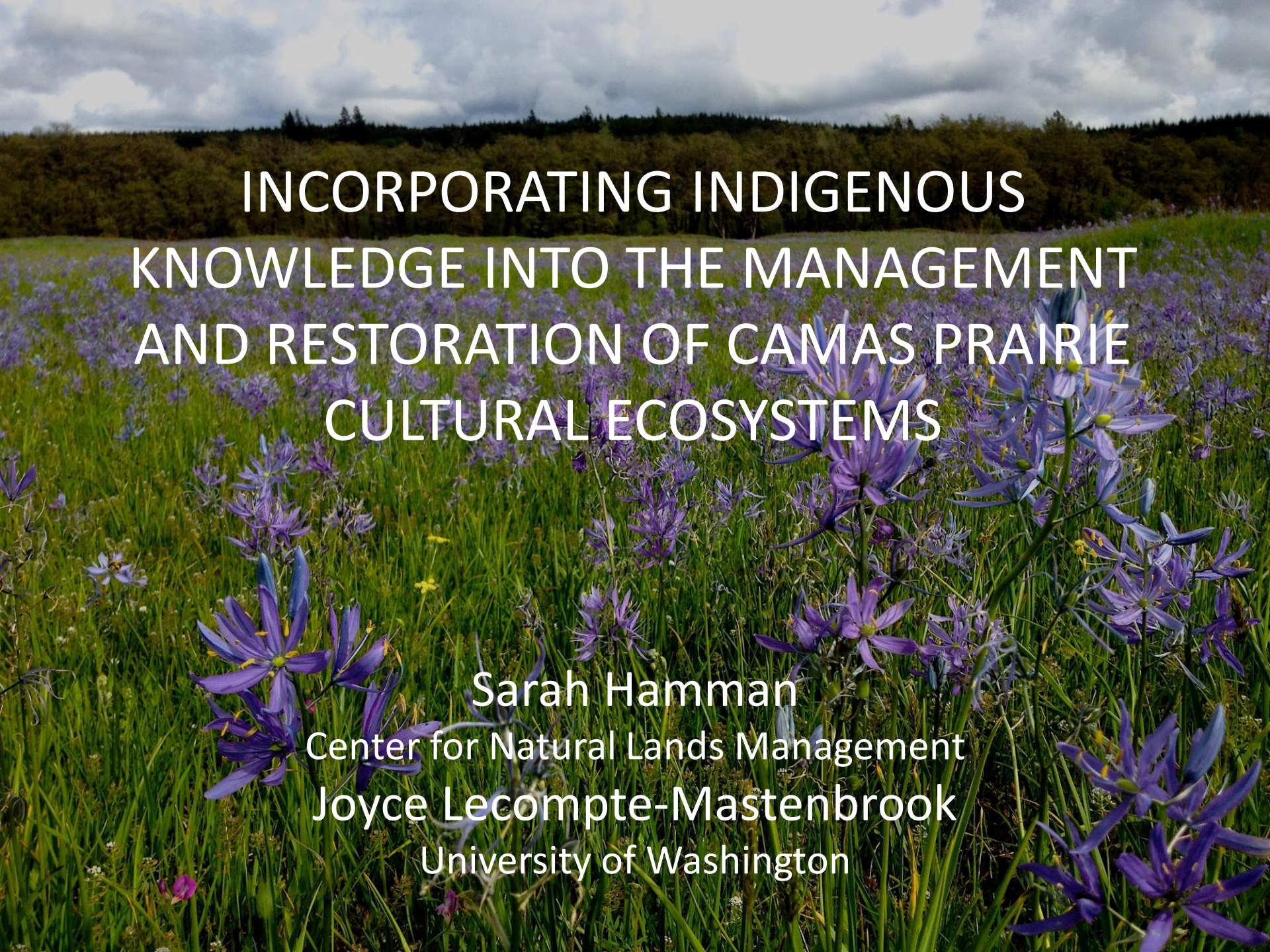




INCORPORATING INDIGENOUS KNOWLEDGE INTO THE MANAGEMENT AND RESTORATION OF CAMAS PRAIRIE CULTURAL ECOSYSTEMS

Sarah Hamman
Center for Natural Lands Management
Joyce Lecompte-Mastenbrook
University of Washington

Historically:

- Formed by retreating glaciers
- Maintained by Indigenous burning
- 2,088,040 acres of prairie and oak woodland throughout Ecoregion
- Continuous habitat

Currently:

- Highly threatened
- 40,000 acres of prairie and oak woodland throughout Ecoregion
- Most prairie converted to agriculture, development
- Fragmented, low-quality remnants



Current Management Strategies



Increasing habitat quality and ecosystem resiliency →

These strategies fit specific goals of endangered species recovery but they largely ignore cultural goals and practices associated with these prairie ecosystems.

Coast Salish People

- Estimated 80,000 inhabitants of Coast Salish territory prior to contact
- Estimated that prescribed burning of prairies began ~5,000 years BP, with changing climate conditions
- US Coast Salish Treaty tribes reserved the right in their treaties to “gather roots and berries ... on open and unclaimed lands”
- Prairies afforded a diversity of plants for food and medicine



Camas Taxonomy and Ecology

Common camas: *Camassia quamash*, Great camas: *Camassia leichtlinii*

- Asparagaceae family (formerly Liliaceae family)
- Perennial forb that grows from an edible bulb
- Found in prairies throughout WPG Ecoregion
- Flowers April – June
- Important resource plant for at least 57 insect species (ants, bees, beetles, flies, wasps, earwigs)





Camas Harvest



- One of the most important root foods for western North American Indigenous peoples
- Second only to salmon in terms of valuable trade item
- Bulbs are often dug during or after flowering using a digging stick or lifting up turf and removing larger bulbs
- Bulbs were (are) pit-cooked for 24-36 hours to fully transform inulin to fructose.

Camas Prairie Cultural Conservation Education and Research Program

Funded through UW Center for Creative Conservation

- Project Incubators support innovative solutions to complex environmental problems by fostering transdisciplinary collaborations

Vision Statement

“Drawing on western and Indigenous ways of knowing, this project will foster the health of Salish Sea prairies and the well-being of people connected to them, through collaborative partnerships based in trust, reciprocity and respect.”

Program Goal

- Collaborate to develop a **transdisciplinary** teaching and research program for the South Sound Prairies, focused on **biocultural diversity conservation**



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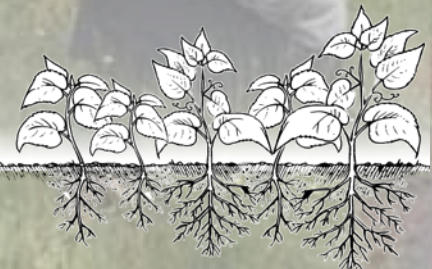
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GROWING HEALTHY FOOD, PEOPLE, AND COMMUNITIES

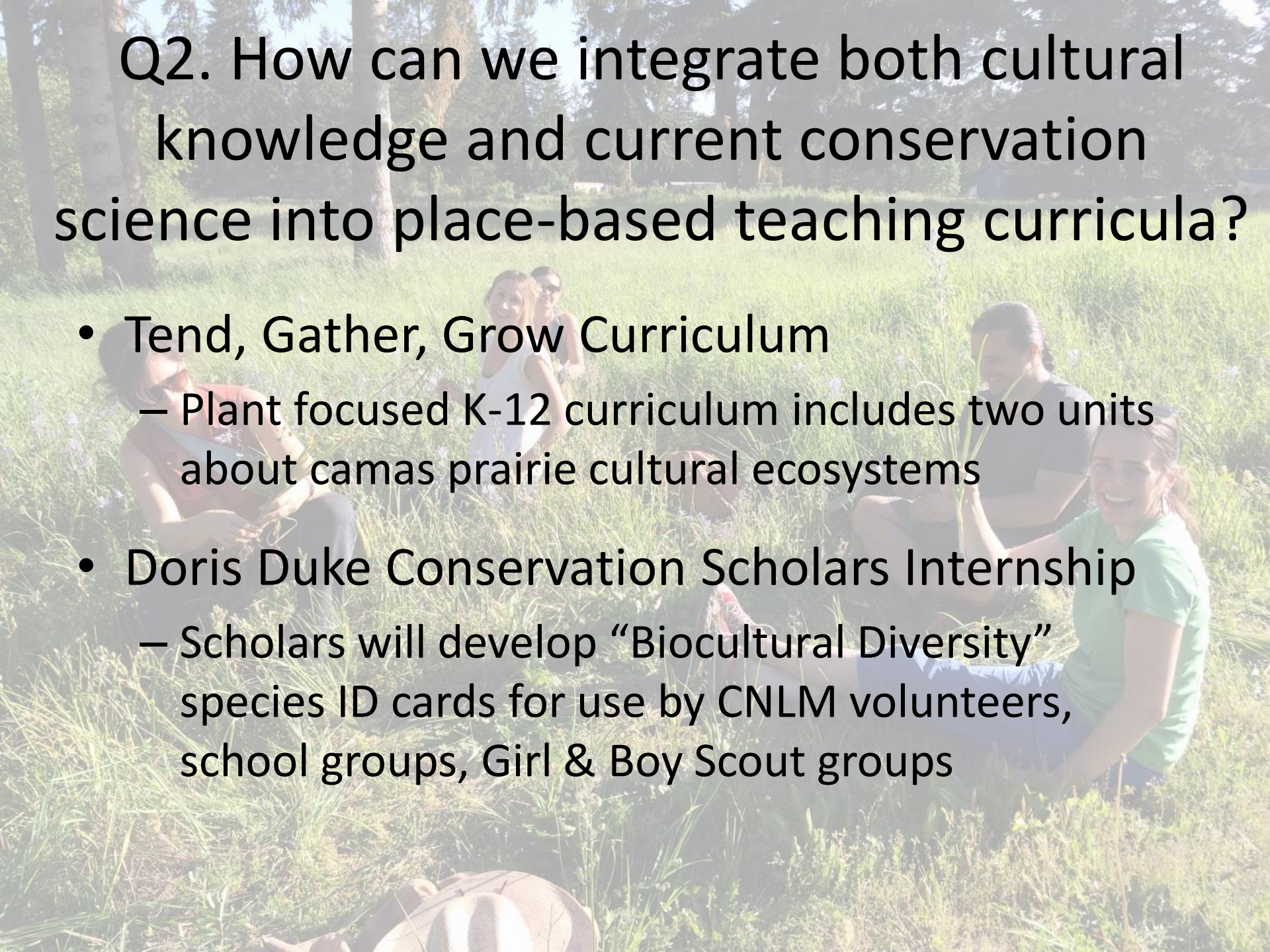


Guiding Questions

1. *Practice:* How can we incorporate culturally appropriate practices into restoration?
2. *Education:* How can we integrate both cultural knowledge and current conservation science into place-based teaching curricula?
3. *Research:* How do the cultural practices surrounding camas harvest affect the structure and functioning of the prairie community?

Q1. How can we incorporate culturally appropriate practices into restoration?

- **Practice:** Increase opportunities for tribal youth and elders to harvest camas
- **Policy:** Increase capacity within tribal communities to direct policy and management of plant resources
- **Native plant materials:** Develop a tribally led eco-cultural restoration nursery and seed bank program
- **Partnerships and Outreach:** Develop new partnerships and communication materials to reach across boundaries

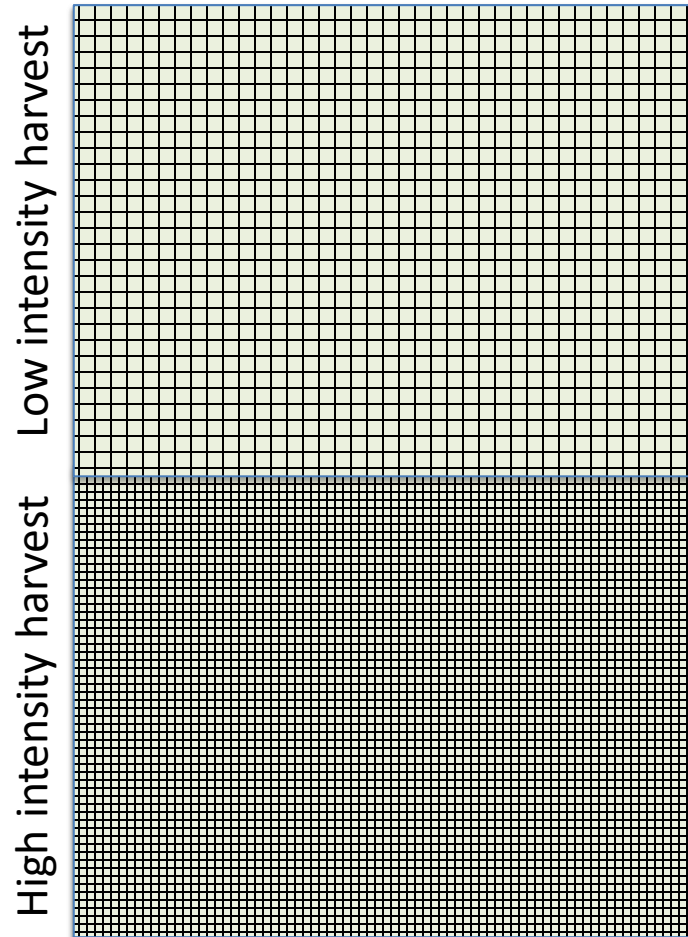
A group of people, including children and adults, are sitting in a grassy field with trees in the background. They appear to be engaged in a field activity, possibly a field study or a nature walk. The text is overlaid on the image.

Q2. How can we integrate both cultural knowledge and current conservation science into place-based teaching curricula?

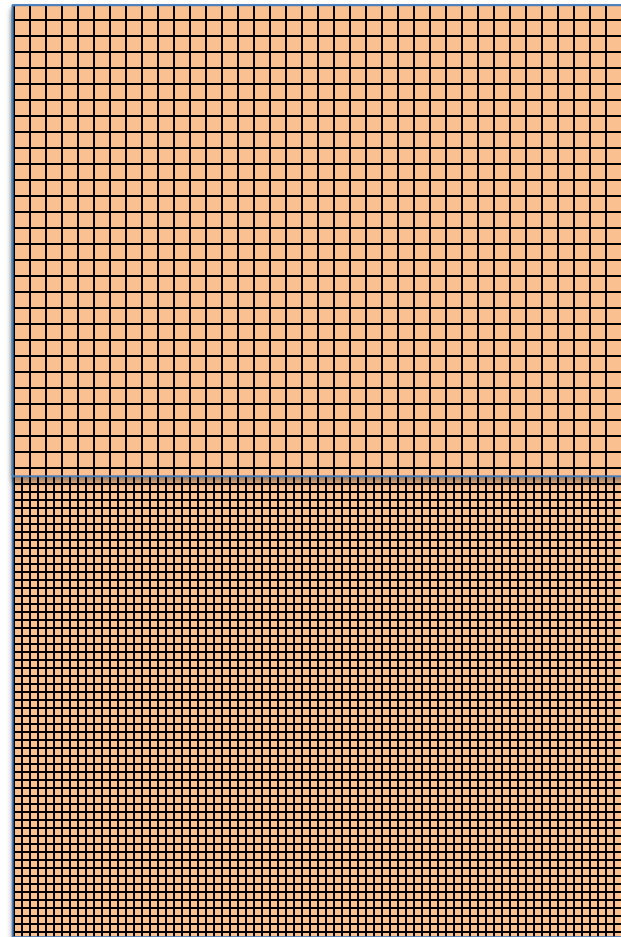
- Tend, Gather, Grow Curriculum
 - Plant focused K-12 curriculum includes two units about camas prairie cultural ecosystems
- Doris Duke Conservation Scholars Internship
 - Scholars will develop “Biocultural Diversity” species ID cards for use by CNLM volunteers, school groups, Girl & Boy Scout groups

Q3. How do the cultural practices surrounding camas harvest affect the structure and functioning of the prairie community?

Spring Harvest



Summer/Fall Harvest



Measure:

- Camas abundance
- Camas flowers
- Native & non-native richness & abundance
- Food species abundance

Next steps for this group

Research Projects

- Initiate Camas Harvest study
- Literature review on Coastal Salish camas history

New Partnerships

- Engage additional tribal members to learn and share
- University of Washington K-12 I-STEAM Camp

Funding Opportunities

- Investigate funding opportunities to help 'fledge' the program



Thank you!

Email-

Sarah Hamman: shamman@cnlm.org

Joyce Lecompte-Mastenbrook: jklm@uw.edu