

Columbines School of Botanical Studies
Wild Food Tending
Field Trips #13, 14, 15
September 27-29th, 2019
Southwestern Oregon Oak Woodland, Meadow, and Mixed Conifer Forest

- Fireside chat: Social forestry and the work of Hazel at Siskiyou Permaculture, Social Forestry Winter Camp and the modern hoop vision, integrating class experience into life, our leadership and community connections

Wildcrafting

- Collected *Q. kelloggii* acorns
- Acorn production varies greatly year to year and is greatly affected by environment; some species are more reliable, such as tanoak; some are less reliable, like white oak
- Tasted *Perideridia gairdneri* roots and seeds, in dry seed stage, and compared root flavor and texture with other seasons
- Acorn collecting ideas—check well-cleared urban areas for most productive oaks, like lawns, parking lots, cemeteries, parks

Botany

- Identified conifers *Pinus ponderosa* (Ponderosa pine), *Calocedrus decurrens* (incense cedar), *Pseudotsuga menziesii* (Douglas fir), and *Abies concolor* (white fir)
- Compared acorns of *Quercus* species: *Q. kelloggii*, *Q. garryana*, *Q. agrifolia*, *Q. rubra*, *Q. robur*, *Q. palustris*

Oak Ecology and Tending Concepts

- Most oaks are shade intolerant, meaning they need to grow in full sun. In the absence of regular surface fires, conifers encroach and compete for light, nutrients, and water
- Most conifers cannot survive the same amount of drought as oaks. If they are allowed to encroach upon and kill the oaks, the forest is susceptible to large scale drought mortality and extreme fire
- Historical forest stand reconstruction exercise—you can read the history of the forest by aging stumps, approximating distances, examining fire scars, assessing the structure of living older trees, then turning back your imagination to visualize the structure of the stand 150+ years ago

- Biochar actually fixes atmospheric carbon and acts as a fertilizer, moisture sponge, and “house” for beneficial microbes in the soil
- When you remove biomass, in the form of small conifers, return the nutrients to the site via ash and/or biochar
- Fall burning between the first drop of bad acorns and the second drop of good acorns decreases acorn weevil population and clears the ground for harvest
- Keep the ground open below the drip line of the oak and up to 3x the width of the drip line—remove any conifers or large shrubs
- Focus on clearing away conifers to the south and southwest that cast shade on the oak canopy
- Gradient of drought tolerance in local conifer species from most tolerant to least: Ponderosa pine (and other pines), incense cedar, Douglas fir, white fir
- It is worth tending even just one oak tree

Tending activities

- Removed encroaching conifers from a large legacy *Q. kelloggii* tree
- Piled slash for a later burn pile
- Saved poles for use in building projects
- Made biochar in kiln
- Biochar soil supplementation around a young oak

Wild Food Preparation

- Acorn processing—sorted, cracked, shelled, pounded, ground and sifted *Quercus garryana* and *Q. kelloggii* acorns, aged one year, using ancient manual mortar and pestle technique, and modern “towel method” and hand crank grain grinder techniques
- Tasted and compared acorn species raw: white oak (*Quercus garryana*) and black oak (*Q. kelloggii*)
- Leached acorn flour over two nights in stream; discussed alternate leaching methods
- Culminating collaborative feast, using stored **wild foods from past classes which we harvested (indicated in bold below)**, as well as any offerings from extra-curricular wild or domesticated food collecting or growing

Menu:

- *Acorn porridge*
 - of two types: fine ground white acorn, fine ground black acorn (1:1.5 acorn to water for thick porridge. You can try more or less water to adjust texture to how you like it. Simmer low for 5-10 minutes)
- *Toppings for Acorn*
 - Savory items: **watercress (*Nasturtium officinale*)**, wild harvested walnuts, bacon, pine nuts, spice infused ghee with **yampah (*Perideridia oregana*) and cous (*Lomatium cous*) seeds**
 - Sweet items: Manzanita berry powder, dried ***Vaccinium membranaceum* berries**, honey, pine nuts, wild harvested maple sugar, ghee
- *Camas bulb*
 - ***Camassia quamash* ssp. *brevifolia* bulbs**, pit baked and then dried, reconstituted by cutting up and boiling in hot water
- *Biscuitroot savory skillet cakes:*
 - ***Lomatium grayi* root flour**, canned wild salmon, onions, eggs, ***Perideridia oregana* green seeds, *Vaccinium membranaceum* berries**
- *Wild berry sauce:*
 - wildcrafted fresh cranberries, ***Vaccinium membranaceum* dried berries**, madrone (*Arbutus menziesii*) dried berries, manzanita (*Arctostaphylos patula*) berry powder
- *“Hoop Soup”*
 - with ***Lomatium grayi* dried root chunks**, fresh veggies, dried beef jerky, ***Perideridia oregana* flowers and seeds, *Stachys cooleyae* leaves**
- *Tea*
 - with ***Rubus spectabilis* young April leaves** and *Pinus ponderosa* needles

○ *Acorn Bread:*

3 cups acorn flour (we used 1/2 white acorn, 1/2 black acorn), moist but squeezed out well from leaching

2 tsp. baking powder

½ tsp. baking soda

½ tsp salt

3 eggs

1 ¾ c. unsweetened hemp milk

2 tsp. Honey (we left this out)

2-6 tsp. fat (we used 6 tsp. melted ghee)

Mix acorn flour with dry ingredients. Mix wet ingredients separately. Then mix wet ingredients into dry. Don't over-mix. Put in pre-heated greased dutch oven and place on thin layer of coals, filling upside down lid with coals so most of the heat is from the top. Bake 20-30 minutes. Or, bake at 350 in the oven. Makes great muffins or pancakes, too.

“The oak landscapes that we inherited from our forebears still bear the marks of former Native American interactions calling for a new kind of restoration that complements other forms of ecological restoration. This new kind of restoration could be called ethnobotanical restoration defined as “reestablishing the historic plant communities of a given area and restoring indigenous harvesting, vegetation management, and cultivation practices (seedbeating, burning, pruning, sowing, tilling, and weeding) necessary to maintain these communities in the long term.” Thus, this kind of restoration is not only about restoring plants, but also about restoring the human place within nature. This type of restoration views restoring as never finished, but rather is about continuous interaction between people and plants as both their fates are intertwined in a place. Uniting oaks and people once again through harvesting acorns, making products from all parts of the tree, knocking the trees, and setting light fires, may offer us ways to coexist, receive products from, and benefit the long-term health and well being of this remarkable tree.”

--From USDA Technical Note No. 2, “Indigenous Uses, Management, and Restoration of Oaks of the Far Western United States”, Authored by M. Kat Anderson