

Pierce College-Fort Steilacoom Oak Prairie Restoration 2010-2011

Kyle Reneman (Environmental science), Miriam Andrew (Environmental science)
Michelle Fischer (Environmental studies), Nicholas Dische (Environmental studies)
University of Washington Tacoma

Purpose for Restoration

Oak woodland prairie is one of the rarest habitats in the United States. It is being lost by human land use and encroachment of invasive species.

Site Description

- located in the City of Lakewood, Pierce County, WA, connected to Fort Steilacoom Park.

- Site cover consisted of native and invasive grasses, scotch broom, blackberry vines and Black locust.
- The site is used for recreation, college field course work, and sky watching by the Tacoma Astronomical Society.

Goals and Objectives

- Restore the Oak prairie to Pierce College-Fort Steilacoom.
- Removal of invasive plant like Scotch broom and Black locust.
- Reintroduction of native plants.
- Increase habitat for endangered species like the Mardon skipper that lay their eggs on Roemer's Fescue.

Maintenance

The effort needed to restore this land to the oak prairie it once was does not stop here many more years of maintenance is still needed.

- The plants will need to be watered for up to two years after planting.
- Protective tubs will stay on the oaks for two years to stop animals from eating them.
- Control of invasive plants like scotch broom and black locust will need to be maintained each year until the prairie plants have taken over the area and little to no signs of invasive are left.

- Below are pictures taken of a healthier oak prairie. These pictures can give us idea of what Pierce College-Fort Steilacoom may look like one day



Pierce College-Fort Steilacoom Site Maps



- Long term Pierce College-Fort Steilacoom Restoration goals

- 2010 – 2011 Site Map

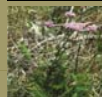
Restoration Techniques



Native plants

The native plants selected where planted to improve the condition of the oak prairie and support native wildlife.

Common Name	Scientific Name
Bracken fern	<i>Pteridium aquilinum</i>
Common camas	<i>Camassia quamash</i>
Erinnervick	<i>Arctostaphylos uva-ursi</i>
Roemer's fescue	<i>Festuca roemerii</i>
Trailing blackberry	<i>Rubus ursinus</i>
Yarrow	<i>Achillea millefolium</i>
Common Harebell	<i>Campanula rotundifolia</i>
Broad Leaved Shooting star	<i>Dodecatheon hendersonii</i>
Wild rosehip	<i>Rosa virginiana</i>
Chocolate lily	<i>Prillirea officis</i>
Prairie lupine	<i>Lupinus latifolius</i>
Woodrose	<i>Rosa nutkana</i>
Bitter cherry	<i>Prunus emarginata</i>
Snowberry	<i>Symphoricarpos albus</i>
Tall Oregon grape	<i>Mahonia aquifolium</i>
Redfruit Rose	<i>Rosa pisocarpa</i>
Oregon White Oak	<i>Quercus garryana</i>



Achillea millefolium - Yarrow



Festuca roemerii - Roemer's Fescue



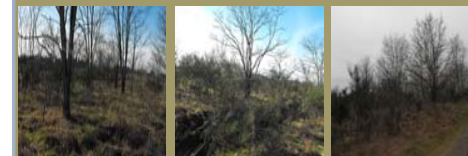
Rubus ursinus - Trailing blackberry



Nucleation patches

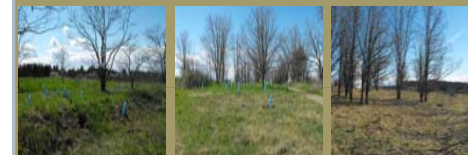
Three nucleation sites where placed through out the restoration site. The Nucleation patches are used to create a well established zone for native plants.

Before



- The area was mostly covered by Scotch broom and black locust before work was started on the site.

After



- All the of the Scotch broom and the small sprouts of Black Locust where removed. In the place of the invasive plants Oaks and other native prairie species where planted.

Acknowledgment

Thanks to all the volunteers from Perce Collage, University of Washington Tacoma. Tacoma community Collage, and the community of lake wood.

Special Thanks to,

- Ron May – Pierce Collage
- Elysia Mbuja – Pierce Collage
- Michele LaFontaine – Pierce Collage
- Rodney Pond – University of Washington
- Warren Gold – University of Washington
- Kern Ewing – University of Washington
- Jim Fridley – University of Washington
- Buck Banks – University of Washington Tacoma



University of Washington
Restoration Biology Network
Bothell Seattle Tacoma



BOTHELL SEATTLE TACOMA

