

Human Ecology Field Project June 26, 2007

Lund's Gulch Watershed Stewardship

SERVICE OBJECTIVES:

- Work with Snohomish County Surface Water Management. Lund's Gulch Streamkeepers and Tannenbaum Home Owner's Association to pilot an assessment tool with quantitative and qualitative measures for Native Growth Protection Areas.
- Help maintain a Native Growth Protection Areas along Lund's Gulch Creek, a Puget Sound tributary that runs through parts of unincorporated Snohomish County, Edmonds, and Lynnwood and drains into the Puget Sound in Meadowdale Park.
- Remove or suppress invasive species such as English Ivy, Himalayan Blackberry, Evergreen Blackberry, Reed Canary Grass, Bind Weed (or Morning Glory), Scot's Broom and others as directed from riparian zones along the creek.
- Clean up garbage and litter in riparian zone buffers along the creek.
- Assist native species survival rate by trimming back Reed Canary Grass and mulching around the plants. Native vegetation in riparian areas provides food and shelter for animals and shade for fish and other wildlife. It slows erosion, reduces the likelihood and danger of flooding, and improves the quality of the water by filtering pollutants out of surface and ground water. Lund's Gulch Creek is a salmon and trout-bearing stream. The native plants you are most likely to find in this area and a reference page in Pojar are listed below.
 - o Ribes sanguineum, Red-Flowering Currant, p. 84
 - o Rosa gymnocarpa, Baldhip Rose, p. 74
 - o Rosa nutkana, Nootka Rose, p. 74
 - o Rosa pisocarpa, Clustered Wild Rose, p. 74
 - o Oemleria cerasiformis, Indian-Plum, p. 72
 - o Rubus spectabilis, Salmonberry, p. 76
 - o *Rubus parviflorus*, Thimbleberry, p. 77
 - o Rubus ursinus, Trailing Blackberry, p.78
 - o Physocarpus capitatus, Pacific Ninebark, p. 73
 - o Crataegus doublasii, Black Hawthorn, p. 73
 - o Amelanchier alnifolia, Saskatoon (Service Berry), p. 72
 - o Blechnum spicant, Deer Fern, p. 420
 - o Polystichum munitum, Sword Fern, p. 421
 - o Gaultheria shallon, Salal, p. 53
 - o Mahonia nervosa, Dull Oregon Grape, p. 95
 - o Mahonia aquifolium, Tall Oregon Grape, p. 95

- o Vaccinium ovatum, Evergreen Huckleberry, p. 59
- o Lonicera involucrate, Black Twinberry, p. 69
- o Holodiscus discolor, Oceanspray (Ironwood), p. 71
- o Tsuga heterophylla, Western Hemlock, p. 30
- o Psuedotsuga menziesii, Douglas-Fir, p. 32
- o Abies amabilis, Pacific Silver Fir, p. 33
- o Abies grandis, Grand Fir, p. 34
- o Abies procera, Noble Fir, p. 36
- o Picea sitchensis, Sitka Spruce, p. 37
- o Pinus contorta, Shore Pine, p. 38
- o Pinus monticola, Western White Pine, p. 39
- o Taxus brevifolia, Western or Pacific Yew, p. 40
- o Thuja plicata, Western Redcedar, p. 42
- o Alnus rubra, Red Alder, p. 44
- o Acer macrophyllum, Bigleaf Maple, p. 45
- o Populus balsamifera, Black Cottonwood, p. 46
- o Betula papyrifera, Paper (White or Canoe) Birch, p. 47
- o Cornus stolonifera, Red-Osier Dogwood, p. 90
- o Rhamnus purshiana, Cascara, p. 90
- o Salix Iucida, Pacific Willow, p. 88
- o Salix Scouleriana, Scouler's Willow, p. 89
- o Symphoricarpos albus, Snowberry, p. 70
- o Sambucus racemosa, Red Elderberry, p. 70
- o Lysichiton americanum, Skunk Cabbage (Swamp Lantern), p. 334

LEARNING OBJECTIVES:

- Describe the significance of riparian zones to the ecosystem (including humans) of Western Washington.
 - Learn to identify native plants and two traditional ethnobotanical uses. See the list of 40 plants above. You will find the Pojar guidebook most helpful in identifying traditional uses.
 - Define "watershed" and be familiar with Lund's Gulch Creek watershed.
 - Explain the social and ecosystem services provided by native plants as opposed to non-native species.
 - Describe the expected impact of riparian zone restoration on salmon populations.
 - Learn to recognize five invasive species that threaten the Lund's Gulch Creek watershed. These species are the Himalayan Blackberry, Orchard Morning Glory, English Ivy, Reed Canary Grass and Scot's Broom.
 - Identify ways that native vegetation can harness feedback systems in regulating populations of species in riparian zones.
- Be prepared to describe the role and function of our primary community partners on this project: Snohomish County Surface Water Management, Lund's Gulch Streamkeepers and Tannenbaum Home Owner's Association.

- Identify and assist Tannenbaum Homeowner's Association (a non-profit neighborhood organization that collectively owns a Native Growth Protection Area) in successful management of this NGPA.
 - Familiarize yourself with NGPAs and ways that humans can be involved in properly managing them.
 - Learn about the history of the land that the NGPA currently occupies.
 - Identify challenges that humans face when managing commonly held resources.
- Maintain field notes recording your activities in Lund's Gulch Creek watershed.
 - Start a new page of field notes for each day of service. Do not remove pages. If you make an error, cross it out, and proceed.
 - Include the following information for each service project:
 - Name of site where you are working.
 - Date and time of day.
 - Weather conditions.
 - Latitude, longitude, and altitude of one or more reference points. Include a description of the reference point(s) and relationship(s) to the work site.
 - Names of other volunteers with whom you worked.
 - Names of plants you learned today (be sure to list all the plants around which you mulch).
 - Two to three pages of descriptions of the day's activities and how they helped you meet the objectives outlined above.
 - Whether or not you carpooled (and with whom).

DESCRIPTION AND LOCATION:

Our activities in the watershed will begin at 10:30 am at the Tannenbaum Native Growth Protection Area.

Tannenbaum Native Growth Protection Area is one of hundreds of such sites established by Snohomish County to protect fragile habitats such as stream and river riparian zones, steep slopes, and other critical areas. The Tannenbaum NGPA used to host a home, bridge, shed, gravel driveway, Christmas tree and llama farm with livestock fences and pens.

For more information about Native Growth Protection Areas visit Snohomish County Surface Water Management's web site.

http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SWM/Services/ Landowners/Streamside/FAQ/FAQ_The_Law.htm

The map and directions below, from <u>http://www.mapquest.com</u>, will take you from Edmonds Community College to Tannenbaum Native Growth Protection Area. We will meet at the Tannenbaum NGPA near the playground at the corner of 50th Pl. and 163rd. St.

1: Start out going EAST on 200TH ST SW toward Hwy 99

2: Turn LEFT onto WA-99. 2.5 miles

3: Turn LEFT onto 164TH ST SW. 0.3 miles

4: Turn RIGHT onto 50^{th} Pl. We will meet at the playground at the corner of 50^{th} Pl. and 163^{rd} St.



TRANSPORTATION:

In the interest of minimizing pollution and enhancing your learning experiences we recommend traveling to and from the site in pre-arranged carpools. If you miss your carpool it is your responsibility to get to and from the site on your own.

In an emergency you may contact Tom Murphy via cell phone, 425-478-5567.

WHAT TO BRING:

Please come prepared to get dirty, rain or shine. Bring the following items.

- This field packet in a three-ring binder.
- "Rite in the Rain" All-Weather Spiral Notebook and pencil.
- One pair of leather gloves.
- One pair of rubber-palmed gardening gloves.
- Water-resistant coat and pants (if raining).
- Boots or sturdy shoes.
- Hat (recommended).
- Pojar & Mackinnon's *Plants of the Pacific Northwest Coast* (recommended).

PRE or POST-FIELD ASSIGNMENTS:

- Read this field packet.
- Review the links in Blackboard to resources on native and invasive species.