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Jazz English (Puyallup Crew Member) and Chelsy Frakes (Yakima Spike Crew Member) practice digging fire lines in the Red Card class.

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Ethnobotany class participants load the steam pit with a layer of Sword Fern.

Swiftwater Rescue class participants pull in a victim in a rescue simulation.

The WCC program gathered at Cispus Learning Center, outside of Randle, WA, for a week of intensive training. Members gained experience and earned certifications in a number of classes including Red Card, Hazwoper, WAFA, Swiftwater Rescue, Search and Rescue, Grant Writing, and more.

Photos by Laura Schlabach

FRUIT TREE GRAFTING: A BRIEF OVERVIEW

BY: LAUREN KEMPER, POULSBO DNR URBAN FORESTRY CREW MEMBER

The SeaTac and Poulsbo DNR Urban Forestry crews attended a fruit tree grafting workshop presented by the Shelton Master Gardeners on February 21. Grafting is the combining of a twig or bud from one plant with the branch or root of another so their vascular tissues unify and continue growing as a single plant. This process can be used to propagate trees, change cultivars, repair damaged trees, and to develop trees on hardy, disease resistant, or dwarfing root stocks. At the workshop, we learned two methods of grafting: cleft grafting and whip grafting.

Common Terms, Tools, and Materials:

The terms scion and stock differentiate between the plants being grafted.

Stock — the root or rooted part of the plant that you are grafting on to; it may be a large tree or only a young seedling.

Scion — the twig or bud that will be added to the stock.

For all grafting projects you will need an extremely sharp knife. All grafting cuts need to be clean and precise, both of which require a sharp tool. You will also need grafting tape and grafting compound. Grafting tape holds your graft together until it takes. Specific grafting tape is manufactured, however, electrical tape, polyvinyl, or a rubber band can also be used. Grafting compound is a wax used to prevent the plant from drying out. There is a specific grafting compound, but paraffin wax or a toilet bowl wax ring - yes toilet bowl- work just as well.

Cleft Graft:

A cleft graft involves a stock that is larger than the scions, such as changing a cultivar after cutting down the old one. To prepare the stock at the base or a branch you wish to graft on to, split the wood through the center at least 2 inches deep. To prepare the scions, shape the lower end into a wedge 1 to 1 ½ inches long. To make the graft, insert the scions into the split in the stock making sure the cambium of the scions and the stock are touching. Seal the stub, cracks, and tips of the scions with grafting compound to ensure it does not dry out. After a season of growth, cut back the poorest growing scion to just a few buds, but leave both until the graft heals completely, then you can remove the weaker scion.



Photo credit: biologyplants.wikispaces.com



Photo credit: commons.wikimedia.org

Whip Graft:

The whip graft is ideal for performing top work on young apple and pear

trees as well as for propagating. I had the opportunity to try this graft at the workshop. I was pretty pleased with the results of my first attempt; it was much simpler than it sounded. Don't be too intimidated to give them a shot if you get the chance. With the whip graft, the stock and scion should be of roughly equal diameter. The stock and scion are prepared the same way. Make a smooth sloping cut through the stock or scion



Photo credit: Chris Hibbard, License

about 1 to 1 ½ inches long, then on the surface of this cut (about one third away from the toe) make a ½ inch slit toward the base of the first cut. This makes a tongue on each piece that can interlock for a more secure graft. When putting the scion and stock together, be sure the cambium layers match up on both sides. If the toe of either the stock or



Photo credit: biologyplants.wikispaces.com

scion extends over the heel of the other, cut it off evenly. Wrap them in grafting tape and seal with grafting compound. Once your scion starts to grow, remove the compound and tape to prevent girdling. Cut back any shoots growing from the stock. This workshop has inspired me to try this at home and experiment with different root stocks and cultivars to make my

own fruit tree. There are plenty of resources online to learn more about grafting. This <u>video</u> showed the cleft graft really well, and this <u>one</u> is a good quick video on how to do the whip and tongue graft. I encourage you to do more research if you are interested in trying some grafting on your own.

Pear Tree Grafting Project By: Supervisor John Longsworth

In March, the Poulsbo DNR Urban Foresty Crew put these lessons to use on a grafting project in Shelton. We gathered scions from pear trees planted in 1870-1890 by Mr. David Shelton, the founder of Shelton. It was a joint venture with the City of Shelton community development, the WSU Master Gardeners and the Mason County Historical Society. We grafted about 100 Dave Shelton pear trees to be planted in new Shelton City parks and sold to the public at Mason's WSU extension plant sale in mid-May. "This workshop has inspired me to try this at home and experiment with different root stocks..."

-Lauren Kemper, Poulsbo DNR Urban Forestry Crew

BUILDING A GEOWEB TRAIL

BY: GILBERT CHARLES, LARISSA JASSO, SAM JOHNSON, ALEX PUMMELL, AND KEVIN SANDIN, TAHUYA/DNR TRAILS CREW

The interpretive trail at McLane Creek, off Delphi Road on Olympia's West side, is one of DNR's most highly used sites. Those who have walked it in the winter know that it turns muddy very quickly. Here is a step-by-step guide to building a GeoWeb trail to increase drainage.





1. Demo and rebuild old boardwalk so that it can support the weight of a quad and a trailer of gravel. Don't lose any measuring tapes in the water.



2. Rip up old boardwalk. Scrape and level old trail. Remove 6-8 inches of mud from most of it.



3. Lay down permeable fabric and cut geoweb to size, holding in place with gravel. Spend an hour resharpening and cleaning tiny bits of

"When we try to pick out anything by itself, we find it hitched to everything else in the universe" -John Muir



4. Haul approximately 74,083,629,404 loads of gravel across a half mile of twisting boardwalk. Beware of slow moving fauna.





"Sound is the vocabulary of nature" -Pierre Schaeffer

5. Leaving space for drains, fill in the geoweb with gravel. Repeat.

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6. Level gravel in geoweb, then compact gravel. And compact gravel again. And again.



7. You are left with a trail that will hold a truck over permafrost. Or keep a class of children from being coated in mud. See it first hand at McLane Creek!

Photos courtesy of DNR Trails Crew

We're Launching a Video Contest! What does WCC mean to you?

Create a video (up to 3 min.) in one of these categories:

•Day-In-The-Life of a Crewmember or IP
•How-To/Instructional
•Disaster Response/Emergency Preparedness
•Why You Should Join WCC
•Artistic/Creative

WCC staff will judge videos on creativity and cinematography (i.e. steady camera!) Bonus points for mentioning AmeriCorps and Department of Ecology. Winners will receive a prize! Submission deadline: July 1, 2015. Additional details coming in our May newsletter. Send questions and video submissions to laura.schlabach@ecy.wa.gov

"In Spring, at the end of the day you should smell like dirt" -Margaret Atwood

ELECTIVE TRAINING SNAPSHOTS



Participants in the 3rd Annual Beard and Moustache Competition



Noelle Ames (King County DNRP Crew Member) practices wrapping fire hose



Supervisor Geoff Baran (left) and Bonnie Reed (Poulsbo Urban Forestry Crew Member) create bow drills in Wilderness Survival



Steve Hoecker, Forest Service, shows the Wildland Saws class part of a stump decayed from laminated root rot



Zach Leavitt (Skagit DNR Crew Member) and Justin Vendettouli (MTSG Crew Member) identify hazardous materials in the Hazwoper class



Supervisor Nick Stevens splices cable in the rigging course

"A tree is an incomprehensible mystery" - Jim Woodring



Accommodation Requests:

To request ADA accommodation including materials in a format for the visually impaired, call Ecology, 360-407-7248. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

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A DAY AT PROTECTION ISLAND BY: KEVIN JOHNSTON, DNR AQUATICS IP

The Protection Island Aquatic Reserve gets its name from the Protection Island National Wildlife Refuge located in the center of the reserve. Because the island is a key nesting area for rare bird species, access is limited. During the month of February, the DNR Aquatics IP team were given permission to go to the island to collect sediment for forage fish spawning surveys. The day was ideal, the normally turbulent waters of the Strait of Juan de Fuca looked almost like a mirror in the calm of the



Photo credit: WA Dept. of Natural Resources, License

late morning. As we circled the island for the first time, we looked up on the bluff and saw several well fed deer staring down at US, watching the loud encircle their boat home. The deer seemed unfazed by the dozens of bald eagles that also occupied the island. While most birds were away in the off season, the island still had plenty of rare wildlife to see as the crew

broke into smaller teams and sampled the entire perimeter of the island. During our sampling we saw even more eagles (that seemed uninterested in us), a couple of otters (which swam away as soon as they spotted us), a large seal which may or may not have been an elephant seal (a debate that still rages on amongst the crew), and porpoises swimming just a few hundred yards off shore. All the while, the deer continued to look down on us from the bluff, watching silently. After our sampling was done, we explored parts of the island that were normally used as nesting grounds for thousands of birds in the summer. We found exciting new vegetation, skeletal remains of birds, and even some deer antlers that the males had just shed after mating season. As we motored away from the island, we looked back one last time to see the everdiligent deer watching our departure, and could only think about the next time we would be able to sample there again.

ABOUT THE WCC

The Washington Conservation Corps (WCC) was established in 1983 as a service program for young adults between the ages of 18-25. The WCC is offered through the Washington Department of Ecology and continues the legacy started by the Civilian Conservation Corps in the 1930s. The WCC has been an AmeriCorps program since 1994. Today, the WCC has around 300 members working on projects in every part of the state. Our partners include Federal, State, Local, and Tribal organizations. For more information please visit our website: www.ecy.wa.gov/wcc.