



The Chinook Bend planting site in Carnation, about 7 years post planting. Photo by Cory Osterhoudt, King County DNRP crew member.

## CLASSES EXPERIENCE A WCC PLANTING SITE

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### By Laura Schlabach, King County DNRP Crew Member

What's a WCC crew to do when a class of 30 middle school students walk down the levee next to your project site? Recruit them to help plant, of course!

That's what happened when students from nearby Cascade Middle School walked by our project in Auburn as part of their Physical Education class. Their teacher asked us what we were doing, and if they could come out and help. I described why we were re-vegetating the land around the new levee, and gave him my supervisor, Kris Buitrago's, phone number. A few hours later Kris was on the phone with their outdoor education teacher, Dan McNeese, scheduling a day for two middle school classes

to volunteer.

The ground was frozen the day the students were set to volunteer with us;

**PLANTING continued on page 4...**



Crew members, Erin Brown (left) and Felicia Whitmore (right), help students plant. Photos by Cassandra Ketterer.



# FEELING KNOTTY?

By Casey Branson, City of Redmond Crew Member

For the Redmond crew, the latter half of October came with the opportunity to work with Citizens for a Healthy Bay at the Place of Circling Waters. A section of this area that was in need of plants and mulch was on a steep slope and rappelling down it was necessary.

In order to learn how to properly secure ourselves to an anchor, Ted Dewees from the Olympia office came to instruct us on knot tying and climbing techniques.

Wanting to make the most of our hour commute, we practiced our knot tying skills in the truck. As we got better, we also tried tying them with our least dominant hand or with our eyes closed. Ultimately, we became more confident and efficient as we worked on this site and others since then.

The most useful knots for roping ourselves in are shown below along with how to make your own harness. Remember to make all of your knots neat and always have another person double check your knots when rappelling. We encourage you to get a six foot length of rope and start practicing!

**Figure 8 on a Bight:** We made this on our 150 foot rappel line to attach a carabiner. Create a bight in the rope and use it as the working end to form a loop. Pass the working end around the standing rope entirely and feed it through the initial loop, pulling tight.

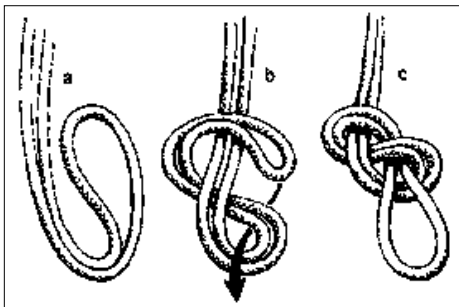


Photo credit: Swiftwater Rescue

**Water Knot:** We used this to connect both ends of our 1 inch webbing around our anchor. Tie an overhand knot on one end of the rope and retrace the knot in the opposite direction with the other rope end. Pull tight.

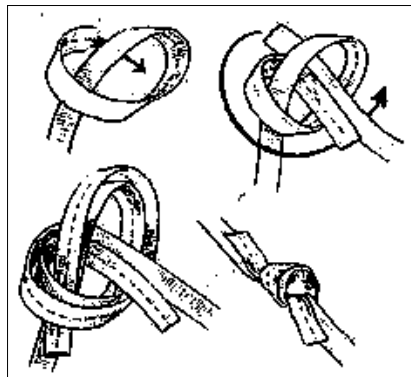


Photo credit: Swiftwater Rescue

**Double Fisherman's Knot:** A more permanent knot we used on our prusik cord.

Place the ends of the rope parallel to each other. Wrap the free end of one rope twice around the second rope and pass it back through the inside of the wraps. Repeat with the second rope in the opposite direction and pull the free ends to tighten.

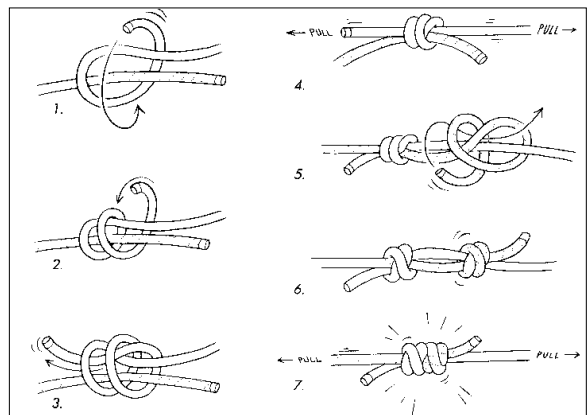


Photo credit: Mountain Leader Nepal Training

**Prusik Knot:** A sliding knot we used to attach the cord to the rappel rope.

Take a cord and form a loop underneath the rope you want to attach it to. Loop the cord over itself and over the rope 3 times, making sure the rest of the cord goes inside the bight. Tighten to finish. Ruckus Society

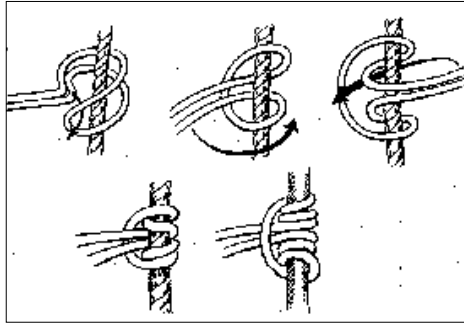


Photo credit: Ruckus Society



Photo credit: Animated Knots by Grog

**Webbing Harness:** Tuck a loop of the 2 inch webbing into the front of your waistband. Pass both ends back between your legs and around your thighs. Then pass the ends through the first loop and around your waist, using up the webbing. Secure it with a water knot or a double overhand. Attach a carabineer through the loop and waist wraps.

**Butterfly Rope Coil:** We used this for packing up our rappel rope.

Begin by setting aside a loose end, about 2 to 3 arms' length. Start stacking the rope in the palm of your left hand, creating an arms' length loop on one side of your hand, then the other. Leave roughly the same amount of rope free at this end too. Wrap the coiled rope 4 or 5 times with the two free ends of the rope. Pull the loose ends partially through the top fold to make a loop and pass the free rope ends through this loop and tighten.

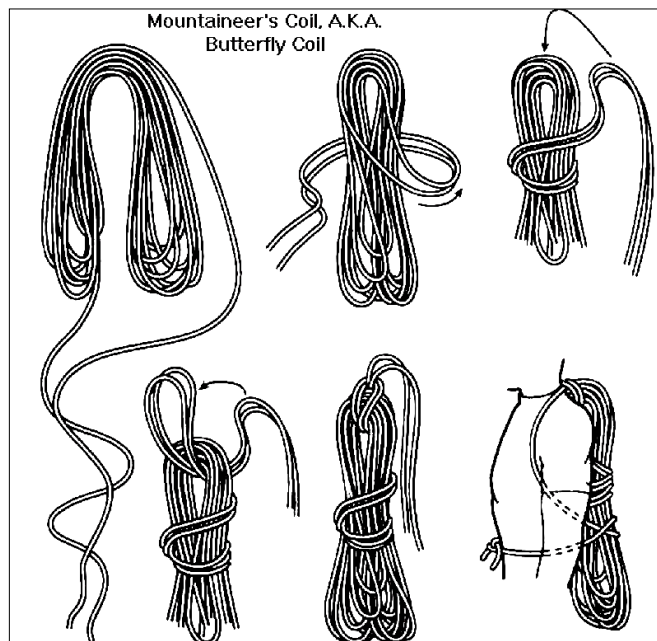


Photo credit: Mountain Leader Nepal Training

*“Truth be told, I’m much more comfortable in a pair of hiking boots or with a rack of climbing gear than in front of a laptop.”*

*-Mark Udall*

# PLANTING (CONTINUED FROM PG. 1)

it was one of the coldest we'd had yet this winter. We dug holes before the kids arrived, to expedite the process, and allow the kids to spend more time actually putting plants in the ground. The students arrived, and after a frenzy of glove distribution, three students went with each WCCer to start off with a quick planting demonstration. Some of the kids worked carefully and precisely, while some worked fast, trying to impress each other with finishing as many plants as possible. And, well, some of the boys found sliding around on the slick sheets of ice much more enticing.

One thing I didn't anticipate was that this hands-on experience could help teach the kids about more than just plants. One boy, after finishing a tree, looked up at me in surprise and said, "You have *girls* working out here?" "Yeah!" I said. He replied, slightly surprised, "They...get dirty and everything?" "Oh yes, we get dirty and muddy all the time," I said.

Previous to their unit on plants and trees, the students learned about fishing, orienteering and hiking as part of Mr. McNeese' outdoor education class. He wrote a proposal last year for the new elective and got the green light.

"I heard a few of the boys talking about how they really enjoyed planting the trees right next to where we fished," said Mr. McNeese. "One boy said, 'In 20 years it's going to be like a forest down here.' The other boy said 'Yeah, a forest that we made!' The third boy said, 'It will be cool when we're down here fishing again in the summertime and we can see the trees that we planted and find out how much they've grown.'"



King County DNRP crew members teach students how to plant trees at the icy planting site.

*"Hope and the future for me are not in lawns and cultivated fields, not in towns and cities, but in the impervious and quaking swamps."*

*-Henry David Thoreau*



Kris Buitrago speaks to a group of students before planting begins.

# ONE MONTH ON THE SOUTH FORK

By Brady Dier and the Elma Crew

Sunlight seeped through cloud cover, setting Hood Canal ablaze with purples, reds and oranges. It was late October when Darrell, our crew supervisor, informed us we would be working with the Washington Department of Fish and Wildlife (WDFW) and the

US Forest Service (USFS), a 20-year partnership with the WCC. Darrell briefed us, eliciting vacant gazes. After the briefing, Zach, the assistant supervisor, set the crew about loading up equipment. Most of us had never heard of a thalweg or hyperreic zone despite years of education. What followed was a learning curve.

## Bull Trout Surveying

The first of 2 projects was surveying the South Fork of the Skokomish River for bull trout spawning beds, or "redds". This area is critical habitat for bull trout, listed as threatened under the Endangered Species Act of 1973. Bull trout are picky spawners, preferring only areas with water temperatures of seven degrees Celsius with adequate cover, stable currents, and specific substrate size. As such, they are particularly sensitive to habitat degradation. Recording data on the location, water temperature, river flow, and approximate time at redd formation allows biologists to monitor the effects of current conservation efforts and plan for the future.



Cooper Gueller, Jeremey Klahn, and Zach Davis, Elma Crew members, survey for bull trout in the South Fork of the Skokomish River.

Gravel crunched under tire as the truck came to a stop. We found ourselves at the gate of USFS road 2361, parallel to the South Fork. As a wildlife enhancement area, road 2361 remains locked Oct - April to all except those

working on enhancements. After donning chest waders, personal floatation devices, hard hats, and survey vests, we were on our way. We split into groups, hiking upriver six miles. Zach, Cooper, and Brady, took the lower half, entering at Cedar Creek and finishing at Church Creek. Darrell, AnnMarie, and Jeremey began where the first group would be exiting the valley and on up to Rainbow Creek. Once on the river bank, radio contact was established to confirm we had reached our respective entrance points.

The optimal location to search for redds features slower currents, Large Woody Debris (LWD), and the proper size substrate near the riverbank. Searching for such conditions entailed fording swift waters to move from gravel bar to gravel bar. Aside from redds, we found a number of remarkable things. AnnMarie recovered a blacktail deer antler while Cooper climbed through LWD the size of a jet. Perhaps the most exciting find came at Harp's shelter near Rainbow Creek, the two groups reconvening point.

**SOUTH FORK continued on page 7...**

*"I believe there are certain places humankind simply cannot improve upon—places whose beauty and interest no photograph could capture, places you simply have to see for yourself."*

*-Bill Clinton*

## WCC ALUMNI: MITCHELL GRITTS WHERE IS HE NOW?

### Experience as a WCC Member:

Mitchell Griggs served as a WCC AmeriCorps member for eight months during the 2012-2013 year, on the Port Hadlock, North Olympic Salmon Coalition Crew.

One favorite experience during his time with the WCC was assisting with Hurricane Sandy relief efforts in New York City. Creosote removal, working outdoors, hanging out with his fellow crew members, and seeing all that the Olympic Peninsula had to offer were also high points during his term. Mitchell credits the physical nature of the WCC with helping him get in shape and become healthier.

### Where is He Now?

Mitchell is now working for the Nevada Department of Wildlife (NDW) in Reno, NV as a GIS/Data Technician. Projects he has worked on include data entry for abandoned mine closure recommendations for potential bat habitat, and database design for a state wide wildlife disease monitoring project.

With NDW Mitchell also had the opportunity to participate in a bighorn sheep capture near Las Vegas.

“The project I was initially hired for was to design a database and manage data for the state veterinarian to track wildlife disease across the state. The major species of interest is bighorn sheep (Nevada has the largest population of bighorns outside of Alaska). I tagged along for the capture to test drive our new data entry sheets and attempt to optimize data recording and tracking procedures to data entry into the database. Sounds boring, but I



Mitchell Griggs catches a bighorn capture on camera during the NDW project he was a part of in Southern Nevada.

did get to handle a couple of bighorns and assist in a couple of necropsies (an autopsy for animals). It was fun and a nice change of pace from the daily office grind.”

### Mitchell's Advice to Career Seekers and Current WCC Members:

“Say yes to every opportunity presented. Whether that is a crew swap or job shadow or a cross country drive. Seek those opportunities as well. They will help you figure out what ‘career’ path you want to follow and what you enjoy doing. Most importantly it will teach you what you don’t want to do (which is just as important). I put career in quotes because my career path seems to change every month.

Build a good resume and get an account on usajobs, they have trail maintenance, restoration, forestry jobs and fire jobs all over the country. Spending time in the lower GS level will pay off for further advancement in those federal jobs. If you do get a desk job it will be tough to sit still. Get a standing desk. It’ll save your sanity.”

*“Say yes to every opportunity presented.”*

## SOUTH FORK (CONTINUED FROM PG. 5)



Bull trout. Photo credit: Northern Rocky Mountain Science Center.

AnnMarie was in the water, filming from under the surface. She had found two bull trout in the initial stages of establishing a redd. Jeremy and Darrell stood within feet of the

animals, marveling at them. "I don't care who you are, that's cool," someone said.

A combination of cold water and low flows through the South Fork made for optimal surveying conditions. Our crew was able to locate and document 20 distinct redds. Once entered into a database and processed through GIS, the observations were sent along to a USFS biologist for interpretation.

### At the Hatchery

The second phase of fish work started with the return of the chum salmon run at the McKernan hatchery. We arrived before the sun's ascent into the horizon, pulling rain gear on over waders. The hatchery workers were decidedly happy to see us, hailing us as saviors and chum-busters. Outside, thousands of salmon churned in their pond. We entered the water and began dragging a seine across its length. Having corralled the salmon near the spawning station, we jumped in their enclosure and brought the salmon life cycle to a re-beginning.

It was truly a fight to the death. The water boiled as our hands reached into the water to retrieve the beasts—the salmon having become the avatar of desperation. They thrashed the length of their body violently, trying to break free. As quickly as they would, into the pneumatic hammer they went. Some required 3 or more crushing blows from the device before expiring. Hatchery workers egged us on as they stripped the salmon of roe and milt. Gametes fell into buckets, one for each sex. In a separate building, the eggs would be fertilized, spawning the next generation. Between sets of buckets, we hurried inside to wring ourselves out and enjoy the doughnuts provided. Obviously, the people at the hatchery knew the motivational power of

simple sugars. We stood there anxiously, pastry in hand, waiting for another round with the chum.

### Carcass Distribution

Working at the hatchery brought compensation in the form of carcasses. The USFS employed us to deploy these carcasses strategically along the upper reach of the South Fork in order to enhance ecosystem fertility. Returning salmon historically migrated upriver to spawn, and having completed their journey, die, leaving their carcasses to return vital nutrients to the ecosystem. In depositing the carcasses, our goal was to kick-start that feedback system.

Two members of the crew accompanied Darrell, hauling carcasses by the hundreds out of the river valley to the now familiar 2361 road. Once they arrived at one of the creeks, the two crew members used pews (shovel handle fitted with a steel spike), to fling carcasses into the water below. Each person kept exact count of how many they deposited in order to help monitor the project's impacts and for bragging rights. Often, it devolved into outright competition. In one trip, Zach and Brady managed to deploy 650 carcasses. By the time the totes were emptied, both were out of breath but already waiting for their next opportunity. Over 6000 carcasses were deployed in a single season.

### Success

By the end of three weeks at the hatchery, our bodies were thoroughly battered and chilled-through. However, we didn't have to wait long for confirmation that our hard work was well worth it. In the last week of November while cutting a pair of logs out of a culvert, the crew saw the effects our work had on the ecosystem's wildlife. Along a single stretch of river we counted 31 bald eagles feasting on the returned chum. The sight brought a reverential silence into the crew bus.



AnnMarie Carley and Brady Dier, Elma Crew members, distribute fish carcasses to increase stream nutrients.



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## MARCH ELECTIVE TRAINING: BRING YOUR HIKING SHOES!



(Left) A study shelter you can only get to by hiking.

(Below) Large woody debris in Yellow Jacket Creek along one of the many trails at Cispus.

March 17th-20th is the WCC's Week 1 of elective training at the Cispus learning center in Randle, WA. During breaks and after hours, there will be plenty of trails to walk and run. If you decide to do some exploring make sure to grab a hiking buddy and let someone know how long you plan to be gone.

Don't forget your...

- Hiking/running shoes
- Water bottle
- Rain jacket
- Warm clothes (extra socks!)
- Hand warmers
- Games and books
- Head lamp or flashlight



## 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 278 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](http://www.ecy.wa.gov/wcc)