



Tributary Tribune

The mission of the AmeriCorps Watershed Stewards Project (WSP) is to conserve, restore, and enhance anadromous watersheds for future generation by linking education with high-quality scientific practices.

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“Water flows from high in the mountains
Water runs deep in the Earth
Miraculously, water comes to us,
And sustains all life.”

Thich Nhat Hanh

What has no beginning,
end or middle and
touches every continent?

Answer on back

Coho Make an Appearance in Gannon Slough by Tabitha Fleming

On March 19, 2009, 5 Watershed Stewards Project (WSP) members from Fortuna Department of Fish and Game (DFG), along with Michael Wallace from Arcata DFG, and Michael McDowall from the City of Arcata, ventured into the field to conduct fish sampling along the Gannon Slough and Jacoby Creek estuary complex in Arcata. Monthly fish monitoring and water quality sampling are conducted to determine if juvenile salmonids among other fish species are utilizing Gannon Slough and Jacoby Creek estuary complex for rearing. This data will assist in the development of habitat restoration projects.

We hiked through the mud and conducted eight seine hauls. Unfortunately we did not capture any salmonids. We did capture other fish including tidewater goby, Pacific staghorn sculpin and a threespine stickleback. WSP member Maggie Groff observed and collected a red-legged frog.

Several minnow traps baited with frozen salmon roe were deployed to sample fish. We captured one coho salmon in a pool upstream of Gannon Slough. This is the first coho that has been captured here since April 2008. We classified the coho as a pre-smolt with readily visible parr marks. It did not appear to have visited saltwater, and is likely attempt-

ing to rear in Gannon Slough. The coho pre-smolt measured 83 mm, and a PIT tag was applied. Over 200 three spine stickleback were captured in the minnow traps.

Overall the day was a success, with WSP gaining valuable experience. We learned about the local fish species, various sampling techniques, and captured the first juvenile salmon in Gannon Slough in over a year.



Left photo, WSP members, Maggie Groff, Rheannon Okey, Jenn Ferreira, Nora Talkington and Tabitha Fleming, along with Mike Wallace from DFG. Look for coho in Gannon Slough



Pre-smolt coho found in Gannon Slough. Photo by Tabitha Fleming

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Forest Conservation Days by Brittany Quaglieri

At this year's 18th annual Forest Conservation Days, WSP members taught youth about forest ecosystems and the sustainable use of forests. Held in Sanborn Park in Saratoga, hundreds of local students from the San Jose area discovered why "Fish Need Trees" at one booth and how long it takes for soil to form at the soils booth, both of which were led by enthusiastic WSP members. Members also acted as docents leading awed children along the half mile nature trail. Enthralling points along the trail included how pencils are made at the forest products booth, the antique steam donkey and the weathered Ghost Rock. Those who attended learned why it's important to conserve our forests and use our National Forests wisely.

WSP Members Make A Splash at Project WET! by Caryn Beiter

“Water is within the experience of all of us. It touches the past, present, and the future. It covers 70% of Earth’s surface, comprises nearly three-fourths of the human body, connects and sustains Earth systems.” (Dennis Nelson, President and CEO of Project WET International Foundation) Project WET is a global non-profit organization dedicated to worldwide water education. Their nationally acclaimed Curriculum and Activity guide for kindergarten through twelfth grades, is a collection of innovative, water-related activities that are hands on, facilitator friendly, and fun! It addresses water’s chemical and physi-

cal properties, quantity and quality issues, aquatic wildlife, ecosystems, and management strategies.

On a sunny Tuesday in March, fourteen WSP members jumped into a Project WET workshop in Redding. As students for the day, WSP members debated water rights, took on the role of salt marsh organisms, played with water, simulated wetlands, and played a few rounds of riparian tag. Through participation in this workshop, members gained valuable skills directly applicable to our Real Science curriculum, which aims to teach

students how to keep water clean, cool and flowing.



WSP member Dan Riddle taking Riparian Tag seriously. Photo taken by Caryn Beiter.

Creek Geeks Shovel Into Action by Melissa Scott



Over 200 Creek Geeks have been inspired to get involved in the health of their watersheds this year. Each year Watersheds Stewards Projects members coordinate and implement hands on watershed restoration volunteer

days. Creek Geeks are volunteers who participate in WSP restoration activities. Past activities have included invasive plant removals, creek and river clean ups and native tree plantings. By joining Creek Geeks, you’ll help improve the health of your watershed through hands-on restoration. Anyone can be a Creek Geek. Including cubs, non-profits, busi-

nesses community members, and anyone interested in getting outdoors and making our watershed healthier for fish and other wildlife. I hope to see you out in our watersheds! For more information about how you can get involved, please visit the Watershed Stewards Project website , www.watershedstewards.com



Volunteers loading English ivy and other invasives into a trailer in the Arcata Community Forest, April 2009. Photo by Rheannon Okey



Lampetra tridentata, found in trap in Freshwater Creek. Photo by Marisa Parish

Fish in Focus... Pacific Lamprey by Melissa Scott

At first glance, it is hard to believe that the Pacific Lamprey, *Lampetra tridentata*, is indeed a fish. *Lampetra* is Latin, meaning suck stone and *tridentata*, meaning three-toothed. The Pacific lamprey lacks true fins, jaws bones and scales. Like salmon, Pacific lamprey are anadromous. They are born in freshwater, migrate out to sea and return to freshwater to

spawn.

Larval lamprey, called ammocoete, occupy a special niche in stream ecosystems, filtering microscopic plants and animals from the bottom sediments. Larval Lamprey spend an average of 5-7 years in freshwater streams. Ocean going adults are parasitic, feeding on salmon and whales.

Lamprey are significant fish to many tribes throughout the Pacific Northwest. They are harvested for subsistence, ceremonial and medicinal purposes.

Site Highlights

Find out what Watershed Stewards Project members have been up to this year

Yurok Tribe Environmental Program

Scott and Matt have been busy planning the 8th Annual Klamath River Clean Up, which was a huge success. Over 150 volunteers showed up to help keep the Klamath River salmon friendly. Scott and Matt spend their days conducting benthic macroinvertebrate surveys on 9 tributaries to the Klamath River and putting in real-time water quality monitoring stations on the mainstem of the Klamath River in preparation for the summer monitoring season.



Matt and Scott conducting pebble counts at McGarvy Creek. Photo submitted by Scott Sinnott.

US Forest Service, Happy Camp

Danielle and Crystal have been planting trees in fire burned areas in Klamath National Forest, kayaking in creeks along the Klamath River and having a hoot conducting spotted owl surveys Klamath National Forest.

Mid Klamath Watershed Council

Emily and Aaron have been involved in prescribed burns which help enhance overall watershed health. They have also been seeing various salmonids in the down stream migrant rotary screw trap. One of the highlights this year for Aaron was assisting the Big Foot Birding Day, part of the International Migratory Bird Day.

Department of Fish and Game Fortuna

This site is full of variety. The Fortuna WSP folks have sampled a diversity of exciting field work. They have conducted spawner surveys, performed longitudinal profiles and monitored restoration sites. They have been teaching numerous Humboldt County youth about the importance of salmon and watersheds.

Institute for Fisheries Resources

Want to know what is going on in the fish world? Just ask Cori and Cameron. At this unique site Cori and Cameron compile and summarize the top fisheries-related news in a weekly newsletter, Sublegals. They are also actively planning the second annual Salmon Aid, which will be held in Oakland on June 20th and 21st. The festival brings together fishermen, conservation groups, tribes, restaurants, politicians, and citizens to learn about and celebrate Pacific salmon.



Nick and Marisa checking for coho in Freshwater Creek. Photo Taken by Melissa Scott.

Humboldt Fish Action Council

At this very hands on site, Marisa and Nick have been busy working the Freshwater Creek weir and down stream migrant trap. They have been pit tagging endangered coho salmon and steelhead and cutthroat trout. The occasional pacific lamprey and prickly sculpin have been know to make an appearance. On extra sunny days Nick and Marisa can be found out at the Humboldt Fish Action Councils native plant nursery propagating plants for riparian restoration.

WSP Mothership Corner

News From Carrie Gergits, WSP's Program Director:

Welcome Sonja!

As much as I had imagined myself continuing the mission of WSP long into my life, I had no idea that after serving two terms as a member I would take only a short detour before returning right back to the same office that had served as my home away from home. With that said, I would like to extend my gratitude to this wonderful community of hard working individuals who have been so supportive and compassionate of my new endeavor. Lindsay Righter was and is a truly inspiring friend and mentor and I feel honored to be following in her footsteps. I hope to continue on with the legacy of WSP and bring to the position my own sense of creativity and determination. The journey will be bumpy at times and smooth at others and in advance I would like to thank all of the members, staff and associates for their patience and encouragement. I look forward to many more years of inspiration and hard work in a program I feel so strongly about.



Sonja dives into work with the Watershed Stewards Project. Photo taken by Caryn Beiter.

Goodbye to Lindsay!

Change can be very difficult. Every year we have to say goodbye to WSP members. Although we are happy for their exciting futures ahead, it is sad to see them go (yea for second year members!). The WSP office operates similarly with staff. We have had many hardworking staff over the years and just as it is hard to say goodbye to members, it is also hard to say goodbye to staff, especially when the work they do is truly exceptional. A captain knows that in order to have a successful voyage, a *Mothership* must have a wise co-captain to organize the sailors and ward off pirates. WSP has had the *tremendous* fortune to have Lindsay Righter at the WSP helm for three fabulous years (with an additional two years of training both on and off the *Mother-ship*). I personally had the great gift of working beside Lindsay for four of those years and can wholeheartedly say that a large part of WSP's success is due to Lindsay's dedication, hard work, and attention to detail. Her insight and creativity truly helped make this program as strong as it is today. On a personal note, as many people know, Lindsay and I operated as a team comprised of polar opposite temperaments and work styles. Our differences provided great balance and success to the work we did together. After four fantastic years of working with Lindsay, both as a partner and a best friend, it is extremely difficult to say goodbye. But as a wise woman once told me,

"Change is the only thing we can count on!" That said, I want to wish Lindsay the best on her new voyage and thank her for her seemingly endless dedication to WSP. Lindsay's work carries on even though she is not personally here every day. Sonja Kulstad-Hurst, WSP's new Project Manager is an excellent example of this. Lindsay was Sonja's mentor for the last two years. The insight and guidance Lindsay provided to Sonja has helped pave the way for everyone involved!

Welcome Sonja!

Transitions can often be challenging, especially when coming into a position where the prior employee did their job so well. I am *beyond* pleased to say that Sonja has done an amazing job of picking up right where Lindsay left off. In addition to being extremely bright and hardworking, having worked in the WSP office for the last two years really helped prepare Sonja for this next step. Although Team Leader and Staff responsibilities are vastly different, understanding the program and its many layers takes years to understand. WSP had the fortune of being able to hire someone who already had that institutional knowledge. This strength combined with her hard work ethic and dedication has helped Sonja ease into her new role almost flawlessly. Welcome Sonja – we are thrilled to have you aboard!

English Ivy: Horticultural Darling, Botanical Predator

by Rheannon Okey

English Ivy has been biding its time. Creeping outward, gathering resources and making preparations to disperse its seeds of destruction.

English ivy is a perennial evergreen vine that was introduced to North America by Europeans as an ornamental landscape plant. It has two growth forms: the ramulose form and the arborescent form. Most people are familiar with the ramulose stage when the plant has lobed leaves and aerial roots that allow it to climb the sides of buildings, trunks of trees or pretty much anything that gets in its way. The plant can remain in the ramulose stage indefinitely unless it achieves enough biomass and the right light and water requirements are met for it to mature into the arborescent form. In the arborescent stage, the plant produces oval leaves on stalks, umbrella-like flower clusters and eventually bluish purple fruits. The fruits are toxic to most birds except for European starlings, American robins, cedar waxwings, house sparrows and stellar's jays.

So, what's with the ominous introduction you ask? What could possibly be bad about ivy? It's an excellent groundcover, it's inexpensive, grows rapidly and it looks oh-so-beautiful climbing up the garden wall. It's an incredibly popular landscaping plant for these very reasons, but it doesn't stay where you put it. If you've ever tried to keep your neighbor's ivy out of your yard, you get the picture. The real trouble begins when it escapes the confines of the urban landscape into neighboring parks, forests and wildlands, displacing native plants. It is adapted to a wide range of ecosystems and has become a problem in many areas of the U.S. and Canada.

The problem with ivy isn't just an aesthetic one; in fact many people find it appealing. Unfortunately, it has severe impacts on various habitats and watersheds. Due to its shade tolerance and aggressive growth habit, it out-

competes native plant communities. This creates a monoculture and reduces biodiversity. It is often planted intentionally to stabilize slopes; however its shallow root system does not actually hold soil on a slope thereby allowing soil to enter stream systems. When it climbs trees, it covers the bark and reduces the trees contact with air which blocks foliage from light. Negative effects on trees include that fact the ivy competes for nutrients and makes trees top-heavy which makes it prone to toppling during storm events. When a large area of trees is destroyed, it opens up the canopy, allowing the growth of other invasive species. When this happens in riparian areas, important shade is removed from stream banks, increasing water temperature and destabilizing slopes.

There are things that can be done to eradicate this troublesome weed and restore impacted areas. The best way is to manually remove it, as it is resistant to most herbicides due to the waxy covering on the leaves. In a heavily infested area, the first priority should be to remove it from trees. This is especially important if the ivy is flowering or fruiting. The most effective method is to girdle the tree being careful not to harm the tree. Clear the vines from the base of the tree for at least a six foot radius. Pull the vines out of the ground, getting as much of the roots as possible. It will re-grow quickly, so repeat pulling will be required. It can take several years for an area to be completely clear of ivy, and even then constant vigilance is necessary to prevent the spread of new growth. Unfortunately, as long as there is ivy producing fruits, birds will disperse the seeds into unwanted areas.

The best way to eradicate English ivy is to not plant it at all. You can help by removing it from your yard, helping your neighbors remove it from theirs or by joining volunteer work crews in your community and help remove it

from public places. For my Individual Service Project (ISP), my field partner Jenn Ferreira and I hosted an invasive ivy removal event in the Arcata Community Forest in Arcata, California. Twenty-nine volunteers removed over 13 cubic yards – that's over 360 cubic feet! We filled a huge trailer to overflowing with English ivy, along with holly and scotch broom. For more information about English ivy and other invasive weeds you can visit the No Ivy League website at www.portlandonline.com/parks/index.cfm?c=47820; the US Department of Agriculture Plants Database at <http://plants.usda.gov>; the California Invasive Plant Council at www.cal-ipc.org; or the California Native Plant Society at www.cnps.org.



English ivy ramulose stage.



English ivy arborescent stage.



WSP member Jennifer Ferreira removing invasive English ivy vine from tree trunk in the Arcata Community Forest, April 2009. Photo taken by Chris Escarcega.



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About the Watershed Stewards Project

The AmeriCorps Watershed Stewards Project (WSP) is a community based watershed restoration program. The program places 44 members in 14 communities throughout 7 counties in Northern California from San Francisco to the Oregon border. Members come from across the US and are teamed up with top natural resource professionals who serve as mentors. WSP partners include a unique collaboration of private industry;

academic institutions,; non-profit organizations ; and local, state , and federal industries and agencies. WSP's focus is improving watershed health, including saving Chinook and coho salmon and steelhead trout from extinction. A special project of the California Conservation Corps (CCC), WSP is administered by California Volunteers and sponsored by the Corporation for National and Community Service. WSP members deliver science based curriculum on watershed processes

and salmonid life cycles to K-12 students in local schools. WSP members also organize and implement an individual service project focusing on hands- on watershed restoration involving community members.



Notes From the Field.....by Michael Kein

A Glimpse into the Daily Life of a Salmon River Noxious Weedier: The sun slowly rises over the glorious Salmon River, yet I am still asleep cozy in my sleeping bag, for today is Wednesday, a weeding work day. Oh blessed day, I get to sleep for an extra half hour. The road to a weeds workday is paved with 10 mph winding blind turns and vertigo producing cliffs. Yet somehow we always seem to get to our destination in one piece. If one arrives on time, expect to wait for at least a half hour. River time can be a continuous burden.

We begin with a daily "first aid" and "strategic" talks. Don't get hurt and pull as many weeds as possible is about all that one really hears. The volunteer crew embarks on the trudge up the steep slope with the dogs nip-

ping at our heels, as well as at each other. The agony of the day only begins with the hike up the slope. Soon comes what feels like endless hours of fighting Italian Thistle. The day passes exceedingly slowly when by one 's self. Working in a group however, the weeds do not seem so furious due to the laughter and song that can often be heard. Songs of peanuts on railroad tracks and jokes concerning local culture lighten the mood.

"A peanut sitting on a railroad track. Along comes a train...Choosooo- Choosooo... Peanut Butter"

This senseless chatter allows us to "thistle" while we work so to speak making the day pass more quickly. Lunch brings us PB&J's and

if we are lucky, home canned salmon, swimming in brine. As the sun begins to slowly pass over the western sky, the crew begins to moan about this or that. Finally the crew boss hears enough and we slowly slide our way down the slope of loose rock, burnt snags, and thickets of poison oak or Himalayan blackberry. A well deserved rest is had by all at the Forks of Salmon community park, while spinning tails of river myth and gossip.

