AmeriCorps Watershed Stewards Project

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 links us to our neighbor in a way more profound and complex than any other."

-John Thorson

Fish Joke:

Why is it so easy to weigh fish?

Answer on Back

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Coho Get a Helping Hand by Hannah Colton

Having a strong interest in how hatcheries can play a role in helping enhance endangered salmon populations, I had the unique opportunity to work with an innovative program on the Russian River in Mendocino and Sonoma counties. The Russian River Coho Salmon Captive Broodstock Program (RRCBP), created in 2001, aids declining coho salmon populations within the Russian River Watershed. Coho from the wild are bred with captive fish, spawned and raised. These "wild captive-reared coho" are eventually released back into the wild as fry or smolts. The goal is that fry and smolts will return as adults and spawn naturally in the Russian River Watershed. Since the start of the program there has been approximately a 20,000 increase in juvenile coho being released. Approximately 6,000 juvenile coho were first released in 2004, and this year about 90,000 coho are expected to be released throughout the watershed. Throughout my AmeriCorps term I felt fortunate to be involved in a variety of tasks. My favorite activity was performing broodstock inventory on the different life history stages of the coho. I also had the exciting opportunity to use an ultra sound machine to look inside the fish to determine if the coho are at the same reproductive stage. This is to make sure the fish will be ready to spawn at the same time. My experience in working with the RRCBP has allowed me to see firsthand how some hatchery programs can help endangered species.

Hannah Colton with adult coho

Capturing Watershed Wonders by Sonja Kulstad-Hurst

Come one, come all to the showing of the 5th Annual Pacific Northwest Wonders Amateur Photo Contest. Sixteen unique and beautiful pictures depicting salmon and trout, wildlife, and landscapes will be displayed at Old Town Coffee and Chocolates during Eureka's Arts Alive on Saturday, December 6th. This will be an exciting opportunity to meet the photographers as well as chat with WSP Outreach Team Leader and Photo Contest Coordinator, Sonja Kulstad-Hurst.

Bald Eagle, by photo contestant Dave Kajtaniak

Weaverville Salmon Festival Celebrates Return of Salmon by Erica Spohn

The 2008 Annual Weaverville Salmon and Heritage Fruit Festival was a successful, fun-filled event. The Trinity County Resource Conservation District, the Chamber of Commerce, and AmeriCorps Watershed Stewards Project teamed up to put on a community festival to honor the salmon who spawn in the nearby Trinity River. Children who came to the event were entertained by making fish prints, fresh pressed apple cider, animal tracks, fish flags, and playing in the salmon tent. Musicians entertained all ages of folks. The festival featured numerous booths highlighting wares made by local artisans, a native plant sale, salmon barbeque, heritage apple tasting and lots of information about the local watershed. There was a great turn out for this year's festival, in spite of some windy weather. The volunteer turnout was also amazing. Thirteen AmeriCorps Watershed Stewards Project volunteers showed arrived from the Northern and Central Regions, who gladly lent a helping hand. Without question, it was a great day to welcome salmon home to their spawning ground in the Trinity River Watershed this fall!

Photo of the Trinity River courtesy of Trinity County Planning Department– Natural Resources Division.

Question from the Kiddos: Do fish have ears? by Sonja Kulstad-Hurst

While fish may not have floppy Dumbo-like appendages sticking out on either side of their heads, you may be surprised to know that fish do have ears. The ears of all fish species can be found deep within their heads. The most interesting part of a fish's ear is the otolith which is essentially the "ear bone". Otoliths are used by fish for balance, orientation and sound detection. Because the mechanism of sound is based on vibrations, fish can actually hear things like a fly landing on the surface of the water or a worm plunking down into the depths below. The otolith is a very important part of a fish's anatomy that is studied by fisheries scientists. Thin sections of an otolith look sort of like the rings on a tree trunk and scientists have discovered that they can extract a variety of information about a fish by looking at changes in the patterns of those rings. (Sosin and Clark, Through the Fish's Eye)

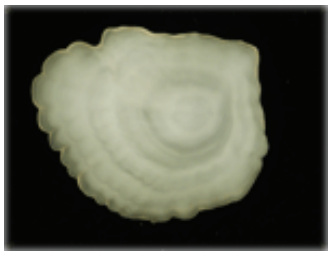

Photo of fish otolith

Artist Erin Hicks rendition of the extinct Sabertooth salmon

*Fish in Focus...*Sabertooth Salmon by Melissa Scott

Back in the late Miocene (23-5 million years ago) to the Pleistocene (2 million to 11 thousand years ago) lived a mammoth salmon, growing up to 9 feet and weighing in at 400-500 pounds! This now extinct salmon is known as ***Oncorhynchus rastrosus, Smilodonichthys rastrosus*** or more commonly as the Sabertooth salmon. Like salmon today, this fish was believed to be anadromous. Sabertooth salmon fossil remains have been found in central Oregon and coastal rivers in California. This fish possessed a pair of fangs protruding from the snout, but fear not! Due to the lack of teeth relative to salmon today, this colossal salmon is thought to have dined on plankton! (Information extracted from http://en.wikipedia.org/wiki/Oncorhynchus_rastrosus and http://www.nwcouncil.org/history/SalmonAndSteelhead).

Site Highlights

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

Salmon Protection and Watershed Network (SPAWN)

Jenny and Kevin have been hiking all over, collecting and propagating native seeds for SPAWN's native plant nursery. Along with their dedicated volunteer force, these plants will find their way to San Geronimo and Lagunitas Creeks helping restore the riparian corridor for endangered coho. They also helped rescue fish this summer when water levels and water temperatures were lethally low for coho salmon.

WSP member, Kevin Cook ,and Creek Geek volunteers remove invasive plants to enhance riparian habitat. Photo courtesy of Kevin Cook.

Mattole Salmon Group (MSG)

Kate and Will have be involved in all kinds of projects in the Mattole. Kate as been traveling the Mattole watershed far and wide retrieving temperature loggers for the Dives and Temps Program. Will has been trekking along East Mill Creek removing fish passage barriers such as culverts and a small dam. Will and Kate have also been working on the Estuary Water Quality Program and this fall and winter they are gearing up for adult trapping and spawner surveys.

Yurok Tribe Environmental Program (YTEP)

Scott and Arieh have been conducting various water quality activities throughout their term. Tests include nutrient, periphyton, general algae and general water quality monitoring throughout the Yurok's Tribe's jurisdiction along the Klamath River.

Department of Fish and Game (DFG)-Hopland

In the spring Hannah and Taylor spend time on the water checking downstream migrant traps and well as screw traps, teaching *Real Science* to future stewards and having fun working on their Individual Service Project. Summer was a busy time in the field conducting habitat typing.

Institute for Fisheries Resource (IFR)

At this unique site Natalie and Harmony have had the opportunity to plan restoration tours, develop local seafood guides, produce the Sublegals newsletter, and attend watershed related meetings. They have participated in exciting events such as the first U.S Slow Food Nation and the first Salmon Aid event.

Fog rolling in over the Mattole Valley. Photo courtesy of Monica Scholey.

Mattole Restoration Council (MRC)

Jen and Monica have been working on various projects including fuels reduction, riparian restoration, tree plantings, native grasslands restoration and native seed collection, processing and propagation. Other exciting projects include the Good Roads Clear Creeks Program, community education and outreach, and GIS projects.

For additional site information visit www.watershedstewards.com

Volunteer Corner:

Meet our Star Creek Geek!

Babs McCoy

Babs McCoy is a native of Lakewood, California (near Long Beach). She is currently pursuing her Master's degree at Humboldt State University in Natural Resources with a fisheries option. After graduation, Babs plans to migrate down to Arizona to be closer to her boyfriend, dry out and warm up. Babs loves volunteering with the Creek Geeks because the "education and exercise is free" ; she also enjoys the delicious grub that is provided to volunteers for all their hard work. Babs not only understands the importance of community service, but her time volunteering has also supplemented her education about natural resources. " I've learned more about the local flora and fauna" Babs states, through all the restoration work she has participated in. When Babs is not out restoring our watersheds, she also volunteers her time with Friends of the Dunes and the National Park Service. Thank you, Babs, for giving our watersheds a helping hand!

Friends of Sam Price plant Sitka spruce in her honor.

Celebrating Creek Geeks! by Melissa Scott

Since the official launch of the Watershed Stewards Project's newest community volunteer watershed restoration program , Creek Geeks, over 500 community members have put in over 2000 hours of community service and still counting! Creek Geek volunteers were celebrated and honored at the first annual Creek Geek Volunteer Appreciation Event held on Saturday, October 18th, at the Arcata Community Forest. Volunteers mingled with other Creek Geeks, resource professionals and WSP members. This year Creek Geeks have planted native plants, removed invasive plants , and picked up trash along riparian corridors, enhancing overall watershed habitat for fish and wildlife. Any one can be a Creek Geek! Come out and volunteer in your watershed! For more information about Creek Geeks visit the Watershed Stewards Project website or email silver@watershedstewards.com.

In Memory of Sam Price by Melissa Scott

On Sunday, November 16, 2008 , approximately sixty Sitka spruce and alders were planted along Campbell Creek in Arcata to honor Watershed Stewards Project member Sarah (Sam) Price (1980-2008). Sam was a true watershed warrior, devoting her best efforts to watershed restoration during her two years of service to the Watershed Stewards Project . Sam found peace and solace in the outdoors birding with the Audubon Society and volunteering her time with various environmental groups removing invasive plants. Her gentle kindness and volunteerism spirit will be greatly missed.

Sam Price , 1980-2008

A Salmon's Story by Erin Hicks

Everyone and everything has a story. As we flow through this life, our day-to-day experiences merely touch the very tip of that which is in close proximity to us, often leaving out the greater (and often incomprehensible) picture of everything we are connected to and a part of. I remember sitting in my Brooklyn apartment a few years back, a good distance from anything that could be considered remotely "natural," watching a brief news segment on the plight of the Pacific Salmon. "Salmon are in a crisis?" I wondered in shock. "I like to eat salmon. Who would have ever thought they were in trouble?" Like I said, I was far from free-flowing anadromous rivers or anything natural. The short blip failed to go into depth but mentioned one very alarming and memorable statistic: "In 40 years, there would be no more wild salmon if things continued as they were." "Wait a second?!" I continued to think. "In 40 years I will be 66, perhaps with children and grandchildren. Why would we not be able to enjoy what generations have been able to enjoy since the beginning of time? What does it say of our stewardship of the Earth when a once thriving and abundant population of a species so vital will cease to exist in a generation or two? What have we done that would deprive future generations of all species that rely on salmon from their existence?" The actual fact that it is even a possibility shows us that something is very, very wrong.

I would never have guessed that a few years later, I would have the opportunity to learn and play a part in the story of the Pacific Salmon. Between my three years as a city dweller and my short year and three months of environmental service to my home state through the California Conservation Corps, I learned from those who have entered my life the value of each individual's unique story. The refusal to learn another person's story serves as the ultimate divider and separator, a solid cinderblock wall that enables us to verbalize the concept of "us versus them." Understanding another person's story allows one to view the commonality in life that we all share. It allows one to connect, to relate, to feel compassion, and to act on that compassion. Understanding another species' story allows us to do the same. It also allows us to see how we, as stewards of the environment, can lend a helping hand. After all, we are the ones who possess that specified physical feature. Otherwise, the saying would be "to lend a helping fin." The fish have already done so for the entirety of their existence by keeping Mother Nature in balance.

Now it is our turn to try to understand their story after over a century and a half of abuse and misunderstanding. This is what the Watershed Stewards Project allows its members, each with their own unique background and story, to do. No doubt, any sizeable bookstore you go into carries an abundance of biographies and autobiographies on interesting personalities and historical figures. But does it carry the title "A Salmon's Story?" How would that book read? If I opened up the autobiography of a coho salmon that lived five hundred years ago, I imagine it would start like this: "This land is made of rivers, the highway ancient and significant. For generations, as far as my mind can swim, my salmon have traveled that magnificent and flowing highway from headwaters to the bountiful ocean and back. I was part of an important cycle, as were my parents, as will my future fry." What about the autobiography of a coho today? How would it read? It is now our turn, as Watershed Stewards, to share that story.

Drawing by WSP member Erin Hicks

"I learned from those who have entered my life the value of each individual's unique story"

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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 heath, including saving Chinook and coho salmon and steelhead trout from extinction. A special project of the California Conservation Corps (CCC), WSP is administered by CaliforniaVolunteers 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 Tanya Chapple

It was Thursday; it was the second week of fall dive surveys on the Salmon River. We walked down the trail and were nearly to the bottom when Steve realized he had forgotten the data sheets in the truck. So I continued down, while Steve went back to get the forms. Our reach began at Cascade, which as the name implies is a cascade, full of boulders and bordered by bedrock. While I was waiting for Steve, I heard a shrieking, peeping noise, very odd. I looked down into the cascade, and noticed an otter slipping in and out of the whitewater. Every time the otter popped out of the water it made that peep. Then there was a chorus of peeping, and a flurry of at least four otters moving up and down the cascade, fighting maybe, playing maybe, but certainly grappling with each other. But what they were really up to, was fishing salmon. A flash of silver followed by a flash of dark fur, an otter emerged triumphant, clinging to a slippery salmon matching it in size. The fish wriggled its powerful body, escaping the hungry hold from the otter, to the peeping dismay of the otter posse. The otters became bored with the cascade after losing the salmon, they congregated in the pool below, and could be seen swimming down river just as Steve returned with the data

Photo of Otter taken by photo contestant winner in the Wildlife category, Emmett Cartier.

Answer: Because they have their own scales !