GRASSROOTS CONSERVATION & RESTORATION IN THE REDWOOD REGION

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TREES FOUNDATION FALL/WINTER 2023-24

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• SOUTHERN HUMBOLDT FIRE SAFE COUNCIL Works with Community Members

• UPDATES AND PHOTOS FROM JACKSON DEMONSTRATION FOREST IN MENDOCINO COUNTY

> • THE ANNUAL SALMONID RESTORATION CONFERENCE DATES ANNOUNCED

> > GROWING TREES FOUNDATION



Editor's Note

We have chosen "Collaboration, Cooperation, and Communication" as our theme for this issue of Forest and River News, but collaboration has always been at the very heart of Trees Foundation. It is our raison d'etre, but as we all know, it isn't always easy. Trees Foundation is growing (p.34) by evolving and adapting to try to continue to improve our ability to cooperate and communicate, and to be the best possible partner in our many collaborative relationships.

Reading this issue, even seasoned veterans of the environmental movement may be surprised by how many influential innovations have been incubated and spawned here behind the Redwood Curtain.

In a look back at "The Roots of Cooperative Management," (p.15) Lost Coast League reflects on the instrumental role Trees Foundation played 30 years ago in negotiating the first Memorandum Of Understanding with the U.S. Forest Service, in collaboration with the Karuk Tribe, allowing cultural burning to be revived in their homelands. Trees Foundation is currently working with organizations like Native Heath in Native Hands to increase opportunities for cultural burning and educating communities on the importance of Traditional Ecological Knowledge (TEK) in land stewardship (p.26).

Institute for Sustainable Forestry's article also includes a retrospective describing the origins of ISF and their development of "Ten Elements of Sustainability," which became the basis of FSC (Forest Stewardship Council) certification and has become an international lumber standard (p.10).

This issue of *Forest & River News* provides a snapshot of both historic and current, innovative and forwardthinking work by grassroots organizations across the Redwood Region. We hope you are as inspired as we are by the ways small regional organizations can have a huge impact on the future and create ripples of positive outcomes when in collaboration with our ecosystems, and one another.

For the Forests and Rivers.

The Trees Foundation Team

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By Salmonid Restoration Federation

Message from the President

The seasonal changes of Fall and Winter often inspire us to reflect. To say we are living in turbulent times describes more than just our climate-driven weather patterns. However dark the impending storms may feel, Trees Foundation and our partner groups have always tried to focus on nurturing our connections to the land to create a future we can feel empowered to influence in a positive way by sustaining a healthy world around us. And we're happy to report that with help from the work of some of our Partner Groups and early rains here on the North Coast, there are now happy salmon venturing up our rivers to spawn.

The Greek philosopher Heraclitus famously said "change is the only constant in life" and Trees Foundation has experienced a number of changes since our last issue of *Forest & River News*.



Through it all, we are able to find grace and gratitude as we look to the ancient trees among us that have weathered many changes and remain rooted and resilient. We have had to say a reluctant farewell to our long-time board president, Susy Barsotti, who retired in July after decades of service (see page 37). She was a steady hand at the helm and will be greatly missed.

Having been active with Trees since its inception, I've decided its my turn to become the Board President and we've now taken a leap of faith and are thrilled to announce after 32 years, we've hired our first Executive Director to help lead an expansion here as well as two new inspiring staff members. We've also added a new board member, John Wilhelm. (See page 34.)

This is exactly the time we need to step forward with more strength, love, and intention. We need to be the "ones we've been waiting for" and create the world that we hope our children and seven generations more may healthily inhabit.

AL BESTSELLER

EETGRASS

I have been Recently rereading aloud a favorite book—with which many of you are already familiar-that has greatly influenced my connection to the natural world. The messages within Braiding Sweetgrass resonate with a beauty and grace I've never experienced before. So many "aha" moments. It was crafted by a brilliant writer named Robin Wall Kimmerer who is also a mother, botanist, scientist, decorated professor, and member of the Citizen Potawatomi Nation. She is able to bridge the academic scientific world's approach to plants and nature with wisdom garnered over thousands of years by the original inhabitants of this continent.

She directly speaks about cooperation, collaboration, and communication

between humans and the natural world around us. She writes about reciprocity and our responsibility to give back if we receive the gifts of bounty from our forests and natural resources.

Providence has it that it is the 10th anniversary of the book's release. I have been so inspired that I wanted to share this wisdom with our Trees Foundation supporters. I reached out to Robin's publisher, Milkweed Editions, who generously donated a number of books to gift to our donors. We are now able to offer a free copy of Braiding Sweetgrass with every donation of \$100 or more. We are excited to pass Robin's wisdom on as a thank you for your generosity. If you already own a copy, we can send one to a friend of yours as a gift.

We would like to take this time celebrate all the good work

we and our Partner

Groups have accomplished in these years. Sometimes trying to do good work in the world can be a thankless job, but we are extending a huge shout of thank you to all who have encouraged, supported, and collaborated with us.

ROBIN WALL KIMMERER

Enjoy the season,

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If You Build It, Will Coho Run? Marshall Ranch Ponds Constructed to Maintain Redwood Creek Summer Flows

By Dana Stolzman, Executive Director, Salmonid Restoration Federation

The Build Up

Coho salmon persist in scattered watersheds throughout the North Coast of California, especially in forested tributaries that provide habitat refugia. Redwood Creek is a rare example of a human-populated watershed that still retains intrinsic potential for coho salmon recovery. For over 10 years, the Salmonid Restoration Foundation (SRF) has studied low-flow trends in Redwood Creek and worked proactively in the community to collaborate and communicate about flowenhancement opportunities.

Community Building is Not a Destination, it is an Interactive Process. Community Building does not often proceed in a linear fashion but rather takes a meandering scenic route with twists and turns you may not anticipate but that often lead to a more integrated understanding of community concerns, communication best practices, and opportunities for collaboration.

Talking about water usage in a time of extended drought and economic collapse of the local cannabis industry is inherently a hot topic. Initially in our early years of monitoring, there was a lot of finger-pointing about water scarcity, whether it was attributed to the legacy impacts of logging, unregulated diversions, or longer dry seasons associated with climate change.

Within a few years of outreach and monitoring, we noticed that landowners cared less about assigning blame and more about sustainable water management options because it was clear that drying trends and fire risk



Joel Monschke (Stillwater Sciences Senior Engineer and Technical Lead), Elizabeth Marshall Maybee (landowner), and Logan Edwards (Edwards Excavation) from left to right at the lower pond site. Photo by David Sanchez (General Manager of the Marshall Ranch)

were not going away. Landowners and restorationists quickly adapted to the changing landscape, and SRF with Stillwater Sciences as the technical lead continued working on feasibility studies of Redwood Creek to understand the most viable options for maintaining instream flows for coho salmon and improving water security for landowners.

Our project team (Stillwater Sciences, SRF, with a technical advisory team) recognized that the single greatest project opportunity was on the historic Marshall Ranch, the largest ownership in Redwood Creek. Our original design was for one 15-million-gallon pond that could release 50 gallons per minute (gpm) during the five-month dry season to fulfill target flows for Redwood Creek to ensure hydrologic connectivity. Although this was widely recognized as a laudable goal, feedback from concerned neighbors and community members encouraged our project team to downsize the proposed project to 10-million gallons and identify flow-enhancement opportunities in Upper Redwood Creek.

Our team went back to the drawing board and spent another year designing and resubmitting CEQA documents. The new design was for two ponds (one on the upper terrace and one on the lower terrace) totaling 10 million gallons of water storage that could deliver 30gpm continuously or be managed adaptively to release varying flows to mimic natural hydrologic fluctuations. This recently implemented design was fully supported by the community and passed the Planning Commission unanimously. The process to this point involved years of community outreach, collaborating with various stakeholders, and ongoing communication with the Wildlife Conservation Board Streamflow Enhancement Program, the primary project funder, and the various permitting agencies.

In the end, it was immeasurably worthwhile to create an innovative restoration project that incorporated input from the community and that is expected to improve conditions in Redwood Creek for decades to come.

The Build Out

The Marshall Ranch is the largest contiguous private holding in Redwood Creek, a critical salmon-bearing tributary that flows into the South Fork Eel River.

The Ranch is fully protected under a conservation easement, and bridges Redwood Creek, Somerville Creek, and Sproul Creek. This working ranch has been in the Marshall family ownership since the 1800s and is protected in perpetuity with conservation "envelopes" for restoration opportunities such as a flow-enhancement project that includes the 10 million gallons of winter water storage between two off-channel ponds and over 100,000 gallons stored in water tanks that will be plumbed for fire-fighting emergencies. The purpose of this project is to release cool water into Redwood Creek during the five-month dry season to benefit threatened salmonids and other aquatic species. The flow releases will

benefit the mainstem of the creek from the Marshall Ranch all the way to the confluence with the South Fork Eel River.

The ponds were constructed in the summer of 2023 on two terraces adjacent to Redwood Creek on the Marshall Ranch. Stillwater Sciences and Edwards Excavation led a team of sub-contractors in the myriad construction phases including grading, excavating and lining the ponds; large wood installation to enhance fish habitat in Redwood Creek. rock grade control structures to stabilize incised gullies; installing a French drain and an infiltration gallery, as well as all the associated plumbing to allow for metered and adaptively managed flow releases. The project site was then seeded with native grasses for erosion control and



Drone photo of the recently completed lined ponds and the meadow area that was reseeded with native grasses. Photo by Hugh McGee, Native Ecosystems



Creating grade control structures on the cooling gallery. Photo by JOAQUIN COURTEMANCHE

light grazing (a designated use under the Conservation Easement). Greenwired is building the solar array and grid intertie system that will power the pumps, valves, meters and gages needed for the long-term operations and maintenance of the project.

In conjunction with the implementation project on the Marshall Ranch, SRF is developing a Storage and Forbearance Program downstream of the Marshall Ranch to ensure that the cool summertime flow releases remain instream and are not diverted by downstream water users. SRF and Stillwater Sciences have conducted site assessments on mainstem Redwood Creek, and we are pleased with how many landowners are interested in participating in the program.

Additionally, SRF is pursuing a flowenhancement project on the Lost Coast Forestland property near the headwaters of Redwood Creek. The Marshall Ranch and Lost Coast Forestland flowenhancement projects combined would help accomplish our target flow goal of an average of 50 gallons per minute of flow release, providing flow connectivity that sustains fish during the dry season.

In Summary

After years of outreach, monitoring, and a Redwood Creek feasibility analysis, SRF and Stillwater Sciences have successfully developed and are pursuing a variety of flow-enhancement opportunities ranging from groundwater recharge in the headwaters of Redwood Creek to flowrelease projects in the mainstem on the Marshall Ranch, storage and forbearance projects downstream, and a recently funded forest-thinning component that will study the nexus between selective forest thinning and dry season streamflow.

This project was developed by several restoration partners, including Stillwater Sciences, the lead technical consultants; the Marshall Ranch General Manager David Sanchez, and the Marshall Ranch family representative Elizabeth Marshall Maybee, who had the vision to preserve the ranch through conservation easements; and Hicks Law, who oversaw the Appropriative Water Right and provides expert legal guidance to the project team. SRF's Executive Director Dana Stolzman stated, "SRF is the project proponent, but this project could not have evolved without the ongoing support of the Wildlife Conservation Board, State Coastal Conservancy, and the hard work of the project team. In this era of extended drought conditions, climate change, and intensified fire risk, innovative projects like the Marshall Ranch Flow Enhancement are needed to improve instream flows."

This evolving work proves the adage that it takes a community to raise a coho!

For more information: calsalmon.org

Southern Humboldt Fire Safe Council

Part of the Web of Groups Working Together to Rebuild Our Relationship to Fire

Submitted by Gail Eastwood, Chair, Southern Humboldt Fire Safe Council

If you watch busy ants around an anthill for a while, you'll see many ants industriously moving a bit of grain or chaff or something. It appears to be part of a coordinated effort to achieve some mutual goal. But where is the commander? Who's got the big plan and is in charge of getting it done? It's clearly working, because you see the viable ant community and its many apparently able, fed, and sheltered ant citizens. Fire organizations in Southern Humboldt can look a little like that. Each works enthusiastically on their own program, their own priorities, not governed centrally. But all are essentially cooperating around the common goal of re-shaping our relationship to fire in our environment.

We want safety for ourselves, for our forests, for all the other living beings we share this place with. Many firerelated organizations, mostly volunteer, have sprung up in Southern Humboldt County over the past 20 years to serve this goal. At the local level, people are aware of local needs and priorities and are willing to work for them. These freestanding groups receive support from larger organizations with greater service areas, including governmental bodies and private non-profits. What are these local organizations?

Fire Companies and Departments

In rural areas of California, we're used to seeing various areas create and support volunteer fire companies and volunteer fire departments. If we weren't so accustomed to this, we'd be amazed that crucial functions like fire protection and emergency response can be assigned to local self-governing organizations with small teams of volunteers! They are

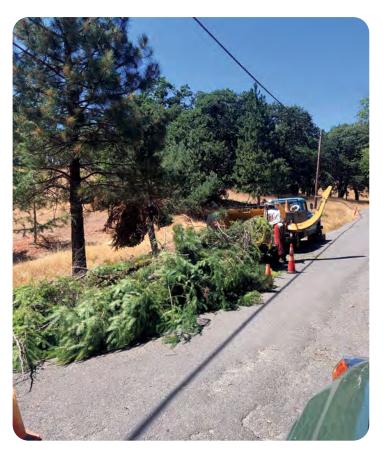
Fuel reduction efforts east of Garberville All photos this article by Kim Phelps, UNLESS NOTED

regulated (but not governed) by official government structures.

Local Neighborhood Groups

The Southern Humboldt Fire Safe Council (SHFSC) has been around almost 20 years. We now see an increasing number of local groups forming in our service area. Many of them appeared in the last five years. It could be chaotic—and yet, for the most part it all works together. Creativity and power emerge from the base of local activism. Larger levels of organization fertilize and empower this base. It's again amazing that this profusion of groups, mostly of volunteers, could be taking on the essential function of wildfire readiness.

We can't do justice in this short article to the work of these local groups, because so much is being accomplished. Here are just



a few inspiring examples among many. Each group looked at what needs to be done in their area and took action.

- The Greater Palo Verde Fire Safe Council has been organizing regular work parties to create fuelbreaks along their main access road and defensible space around the homes of vulnerable elders. Their efforts and willingness to obtain landowner permission attracted outside funding to their area.
- The newly formed Ettersburg Fire Safe Council has received technical assistance funding. This included support for becoming a 501(c)3 non-profit. More recently, they received a \$500,000 grant for defensible space work, in collaboration with the Briceland Volunteer Fire Department's new fuels reduction crew. This crew will employ firefighters in the off-season.

- The Whitethorn Fire Safe Council built a Neighborhood Emergency Support Team (NEST). The NEST network communicates with the neighborhood, making efforts to care for vulnerable individuals in case of fire and other emergencies.
- The Garberville group, now a recognized Firewise community, is busy enacting their Firewise action plan—tabling, distributing leaflets, offering consultations on defensible space and fire-hardening of homes. They received funding to distribute fire blankets to homeless encampments, to empower these residents to control fire escaping from campfires.
- The Benbow group, also Firewise certified, provided impetus and strong support for the expansion of Garberville's fire district to include them as well as other areas not previously in any fire department's service area.

Organized Planned Burning

We're excited about the numerous local burns that have happened thanks to the dedication of the Southern Humboldt Prescribed Burn Association (SHPBA) and its parent, the Humboldt County PBA. Through the work of the SHPBA and its parent, the Humboldt County PBA, numerous local burns have happened. The Wailaki Cultural Burn Crew, with the Wailaki non-profits-Native Health in Native Hands and Eel River Wailakiimplemented the first Community Park cultural burn. Developing the culture of and resources for burning is critical to making our forests more fire-resilient. Fuels reduction by hand work and equipment work is necessary at this point in time. But the fuels problem is too big for these methods alone to resolve. For that, we need to burn on a landscape level.

We are on the path to getting more comfortable with and more skillful in handling the presence of fire. We do that, in part, by working with one another on planned burns. Neighborhood burns give many local residents their first taste of purposeful burning. Burning as a neighborhood can be exciting and fun—and as we do this we're building the experience and expertise we need.

Non-Profits

Trees Foundation is one among a number of organizations that support fire-related efforts in our region. Trees deserves special recognition as a locally based organization with a new focus on fire. Through contracts and fiscal sponsorship they are helping to funnel money to our



The Greater Palo Verde Fire Safe Council was made aware that there was a deficit of trained traffic controllers/flaggers for the latest successful and ongoing evacuation route fuel reduction project on the Bell Springs Road, orchestrated by Restoration Forestry and the Humboldt County Resource Conservation District. We put out a call to the community and had a group of about 10 community members show up. We were able to conduct the training as a group behind The New Harris General Store. It was incredibly fun and satisfying to have the work go to locals and to work together as a team in helping our community become more fire resilient, plus hire locals in this depressed economy!

.....

area and its local groups. They are working

to foster the collaboration of fire-related

groups and organizations in the Southern

Humboldt/Northern Mendocino region.

Getting back to our anthill metaphor-

how is this coordinated? No one

individual, no one organization, seems to

be in charge of all this impassioned effort!

How do resources from larger units-like

the big bucks from national and state

sources-filter out to more local levels?

How does the research on fire safety,

Coordination and Collaboration



The October 19 cultural fire burn at the Southern Humboldt Community Park-the first Cultural Burn in southern Humboldt in over 150 years—is a great example of southern Humboldt collaboration in action. Collaborators included Eel River Wailaki, Native Health in Native Hands, Wailaki Cultural Fire Crew, Trees Foundation, Briceland VFD, Garberville VFD, Humboldt County Prescribed Burn Association, Southern Humboldt Community Park, and local volunteers. The burn was conducted where a natural Hazel Grove lives. The hazel, or lachindé in Wailaki, is an important basket-making material and provides healthy nuts for animals and people. The hazel has been managed for many thousands of years till recently and now is not producing nuts and the stems of the bush are not able to be used for baskets or other uses without being maintained with fire and pruning. PHOTO BY KAI OSTROW

wildfire preparedness, and protection get to the people who need to protect their homes and lives? It turns out that there are groups and organizations at all these nested levels (local, regional, county, state, federal) that have taken on functions of coordination and communication of information. But there is no command structure here. Instead, we see an elaborate dance of collaborating, helping, inspiring, and supporting.

You'll find a lot of the power and energy in all of this at the local level. Organizations that serve larger areas offer coordination and resources to these areas. The SHFSC, for example, serves the local fire safe councils in its service area. It also serves other forms of local fire-preparedness organizations-Firewise Communities and other more informally organized fire safe groups. The SHFSC is in turn served by the Humboldt County Fire Safe Council. The California Fire Safe Council serves all these nested levels. It's an unusual but not hierarchical way of working together that inspires creativity and initiative at all levels. (Want to have a fire safe council in your neighborhood? Forming a neighborhood FSC involves about as much red tape as forming a book club!)

One key planning and coordination effort (among numerous efforts at various levels) is the County Wildfire Preparedness Plan (CWPP). Counties update their plans about every five years. This year, for example, both Mendocino and Humboldt counties are starting the update process. The plan attempts to gather and prioritize actions and projects. Funding sources want your proposed project to appear in this plan. In Humboldt County, the county FSC reaches out to its regional FSCs to help with revision of the plan. The SHFSC, in turn, will reach out to its various neighborhoods and residents to identify priority actions. There are gaps, where no VFD exists to serve, where no fire safe group has yet grown up. How will the gaps be filled after we become _____

aware of them in the planning process? Developing an outreach plan that would foster the filling of these gaps will likely fall to the regional and county-level FSCs.

The interwoven net of collaboration is dizzyingly complex. This article only sketches a segment-there's a lot more happening here. The county Resource Conservation Districts play an important role in our rural part of the state. Other organizations that are woven in include State Parks, the Coastal Conservancy, North Coast Resource Partnership (NCRP), CAL FIRE, and private companies like Mendocino and Humboldt Redwood Companies. Private landowners, including large ranches, also take on an essential role. Any large project is likely to involve the skills and effort of many people and a number of organizations.

Conclusion

We have become aware of the errors of the past in relationship to fire. The wellintended suppression of fires, on top of clearcut logging, created a fuels problem we'll spend many years dealing with. We learned that not allowing fires to burn only increases the danger of wildfire in the long run. We have started to rebuild our relationship with fire in intimate local detail. What do we need to do in order to make it safe to live a human life in a place where fires burn? We are learning bit by bit. We are learning how to make the landscapes around our houses and other buildings fire-resistant. We are learning to build structures that resist fire. We are learning to tend our forests in ways that help them resist catastrophic fire. Making these changes requires us to work together, and to work with the forces of the natural world. In rebuilding our relationship to fire, we are starting to rebuild our relationship with the natural world.

For more information: sohumfiresafe.org

Institute for Sustainable Forestry A Brief Retrospective, Current Update on Projects, and Looking Ahead

Submitted by Chip Tittmann, President; Greg Condon, Treasurer; Gray Shaw, Secretary; and Board Directors Richard Gienger, Jeff Hedin, Liz Harwood, and Connie Smyser

Over the last 39 years, ISF has built a legacy of promoting forest health, forest protection, and sustainable forest products utilization in NW California, all while collaborating with local NGOs, Tribes, and public agencies.

Our Roots

Having witnessed over-harvesting of old-and second-growth conifers in the 1960s and 1970s, Jan Iris and a cabal of forest activists established a new, alternative business model to utilize marginal hardwood tree species that were ignored by softwood timber operators. These hardwoods-tan oak and madrone-were being poisoned and burned as slash while redwood and Douglas-fir were clear-cut, replanted as a plantation, and then harvested again on 40-to 60-year rotations. Wild Iris Wood Products, formed in 1985, introduced tan oak flooring and madrone trim, flooring, and wainscoting.

Harvests of local timberlands also needed to be scaled back, with longer rotations and awareness of the ecological value of wildlife habitat, forest soil, and water for fish reproduction. The Institute for Sustainable Forestry emerged from Wild Iris to advocate for quality control of timber harvests. ISF proposed a forest management protocol with guidelines and restraints to ensure protection for old growth, fair wages for timber workers, responsible forest management, and diversified forest products beyond the few remaining stands of softwoods. ISF's Ten Elements of Sustainability became the basis of FSC Certification, an



ISFers at beginning of The New Forestry Trail at the Southern Humboldt Community Park. From left: Jesse Hill, Nonae Sears, Kathryn Lobato, Gray Shaw, Greg Condon, Liz Harwood, Chip Tittmann, Richard Gienger, and Tim Metz. Photo by Chip Tittmann

international lumber standard based on ecological forest management.

From those impressive roots, ISF has continued its quest for balanced timber harvests, awareness of the beneficial relationships of all forest inhabitants, and the economic viability of forest communities.

A Broad Spectrum of On-the-Ground Activities

Over the last five years, the Institute for Sustainable Forestry has expanded its mandate and outreach. ISF sponsored and cosponsored fire workshops that promote prescribed fire, biochar, and fuel-reduction practices, stressing the importance of friendly fire management for forest health and the value of good fire on the landscape. Our collaborators include the Garberville Rotary Club, KMUD, the Mateel Community Center, CAL FIRE, BLM, USFS, Mattole Restoration Council, Friends of the Lost Coast, Trees Foundation, Forest Reciprocity Group, Eel River Recovery Group, North Coast Resource Partnership, The Headwaters Fund, Humboldt Area Foundation, Humboldt County Prescribed Burn Association, the Southern Humboldt Community Park, and many of the local Tribes: Kato, Yuki, Wailaki, Wiyot, and Hoopa.

ISF also initiated a Sustainable Forestry Journalism Project that has produced and aired more than 50 informational radio shows promoting good forestry practices, describing add-on values of neglected forest materials, and recognizing local citizens who have been doing the experimental and groundbreaking work of sustainable forest management. Agroforestry—the use of non-timber forest products such as native nuts, fruits, berries, basket materials, herbs, and mushrooms—has become another primary focus of ISF. We have cultivated elderberries, chestnuts, native plums, and hazel nuts for sale and as a fundraising tool for local non-profits.

Through the leadership and inspiration of Board Member Liz Harwood, we brought together a large group of Indigenous Americans, fuel-reduction experts, trail enthusiasts, and oak woodland and meadow specialists to restore Southern Humboldt Community Park. Grants have been awarded for gully remediation, a native and agroforestry plant nursery, expanding the New Forestry Trail with signage and benches, and reintroducing cultural fire at the park. This good fire will help to restore production of Indigenous basket-making materials and other plants traditionally used by local native peoples. A merging of Indigenous people's and non-natives' interests has sparked exciting collaboration at the Southern Humboldt Community Park.

ISF is also instrumental in organizing forest thinning and fuel-reduction projects with grants from CAL FIRE. Recently Chip Tittmann, Tim Bailey, the Mattole Restoration Council, and ISF participated in creating a \$4.9 million funded project that is helping build fire resilience in the Salmon Creek and Mattole watersheds. Another \$4.9 million funded project is occurring in the Red Mountain area east of Piercy that was fostered by Jeff Hedin and ISF. Both these projects have funded and enabled local crews and forest restorationists to work in their own communities.

Looking Ahead, Adapting to Climate Change

As climate change threatens life on Earth, our forests represent a vital defense. ISF's priorities going forward will focus on the forest as a carbon-sequestering system



ISFers tabling and selling agroforestry plants at Salmon Creek Community Exchange. From left: Tim Bailey, Gray Shaw, Chip Tittmann, Kyle Keegan, Richard Gienger and Greg Condon.

and productive food source. Building aware and adaptive communities capable of remediation is key to a healthy and sustainable world.

Our vision is a forest teeming with life, where natural systems support the biodiversity of every living thing that evolved to be there. This means bringing the forest back to the healthy landscape it once was, not a monoculture devoid of humans. We need the gardener's shadow, people tending and harvesting.

Reciprocity

The restoration economy will help bridge our economic transition in the near future while we learn what to grow and how to tend. Industry will evolve with what the forest provides, and we and the forest both benefit. We will become intimate with our native flora and fauna, our geology and geography.

The old villages of past enterprises will be re-peopled. From Branscomb to Weott, Laytonville to Phillipsville, communities will rebuild with a new ethos of restoration and respect. Back to our future.

Be Part of Our Work and Network

ISF has gratefully collaborated with Trees Foundation for many years to promote and publicize events, coordinate with regional non-profits, and share expertise.

As ISF moves toward its 40th anniversary next year, we encourage all interested forest enthusiasts to join our organization, expand further networking, and increase collaboration with others. We are looking for radio journalists and show producers, tree and native plant nursery green thumbs, grant writers, board members, advisory committee members, workshop and tour leaders, and policy wonks seeking to move the legislatures, timberland owners, and local governments toward better forest practices.

Visit our website at instituteforsustainableforestry.com and join our team in any capacity for which you have a passion, interest, or skill.

SPAWN Nursery The Power of Community Over 20 Years of Propagating Native Plants

By Audrey Fusco, Nursery Manager and Restoration Ecologist, Salmon Protection and Watershed Network

The SPAWN restoration nursery, *seaturtles.org/nursery*, grew out of the desire to restore creek habitat for coho salmon by utilizing local genetic stock of native plants that were not available in any nursery. Beginning as a volunteer effort, we sought experts to mentor us on how to collect and grow native seeds and cuttings. Over the past nearly 20 years, we have grown into a professional operation that propagates several thousand plants a year, grows more than 100 native species local to Marin County, and trains others who are interested in restoration.

Along the way we have maintained our grassroots volunteer base that powers the operation with an amazing group of people who enjoy continuous learning and the camaraderie of working to make the world a better place. Initially focusing on riparian (creekside) plants, our focus has expanded to include propagation of plants that benefit pollinators, to support vulnerable insects like monarch butterflies, and to grow long-lived species like redwoods to sequester carbon and mitigate climate disruption. Our educational efforts emphasize the importance of planting natives to support a web of life and a myriad of species, including endangered California freshwater shrimp, red-legged frogs, and migratory birds.

The Early Days

The Salmon Protection and Watershed Network (SPAWN) was established as a project of Turtle Island Restoration Network (TIRN) in 1997, when Todd Steiner, Executive Director of TIRN,



discovered migrating coho salmon stuck on the broken apron of a small dam at the former San Geronimo golf course in West Marin County. Steiner garnered community members to push for a solution that would improve the ability for salmon to pass upstream of the dam by utilizing grassroots action. Following the construction of Roy's Pools on the former San Geronimo golf course, the need for further restoration work and plants to shade the banks following restoration work was obvious, but plants of local ecotype were not widely available. (See: treesfoundation.org/2021/04/ *from-roys-dam-to-roys-riffles*)

SPAWN sought out sources of native plants grown from local genetics for early watershed restoration projects. Initially Circuit Rider, a native plant nursery in Sonoma, would propagate the seeds and cuttings at their nursery and sell the plants back to SPAWN when they were ready for out-planting. Eventually SPAWN decided it would try to start its own nursery. Mel Wright, current volunteer and former nursery manager, describes the origin of the nursery: "When SPAWN started as an organization, it was clear that restoration work was needed to provide better habitat for the salmon. We used to purchase the plants we needed to stabilize the creek banks from local native plant nurseries. We realized that we could grow the plants ourselves with seeds and cuttings gathered from our own watershed. We took it on. We learned a lot over the years. We had a lot of fun with it."

At the beginning, Mitch and Julie Todd, avid supporters of SPAWN, offered a corner of their backyard in Forest Knolls to get the nursery started. Circuit Rider was recruited to train SPAWN volunteers in how to collect seeds and cuttings. Following a small fundraising campaign, SPAWN purchased a shadehouse and a small greenhouse, and with a small group of enthusiastic volunteers led by Mel Wright, Steve Meyer, Ken Bouley, Dan Mcleod and others, two propagation benches, a greenhouse, a shadehouse, and six tables utilized for housing plants were assembled. Tables were assembled from recycled fence materials.

In the early years, SPAWN provided housing for and received assistance from AmeriCorps members, and volunteer Mel Wright was promoted to the position of Nursery Manager. Paola Bouley, former Watershed Biologist with SPAWN, was instrumental in implementing the vision for the nursery, which had been created by Steiner and SPAWN community members. Volunteers came together each Friday to work in the nursery. Volunteer sessions often extended beyond work hours and were followed by social gatherings, field trips, and other learning opportunities.

Early Volunteer Experiences

During the first decade the nursery volunteer group successfully grew dozens of species of native plants, which were used in salmon habitat restoration projects, including creek enhancement projects on private property in the San Geronimo Valley, road repair work to reduce sedimentation into tributaries, plantings along the creek on the former San Geronimo golf course, and plantings on public park land. SPAWN also worked with programs that included biological salmon monitoring, fighting unfettered development along streams, leading creek walks, installing roof catchment and raingardens to promote water conservation, and providing consultations to promote habitat protection for landowners.

Long-time volunteer Nancy Hanson recalls the planting projects during the early days of volunteer-led restoration



Volunteers Mel Wright, Bill Teufel, and Nancy Hanson All photos this article by Audrey Fusco of Salmon Protection and Watershed Network

efforts: "Nearly 20 years ago volunteers planted trees and shrubs into the rocky riprap banks on Woodacre Creek. We took out some invasives and also planted trees and smaller low bank plants. The creek is totally shaded there now with alders, maples, and creek dogwoods. The area looks lovely today."

Many of the SPAWN nursery and restoration volunteers took what they learned through volunteering and applied their knowledge of native plants to their own backyards. Bill Teufel, who has volunteered with the nursery since 2007, explains, "I, like all the nursery volunteers, enjoy working with other native plant-



Volunteers Collect Seeds at Samuel P. Taylor State Park

loving folks but equally enjoy taking what I have learned in my years of volunteering and applying it to my one-acre wooded home property in San Geronimo. I now find myself surrounded by a native plant woodland garden instead of a sea of Himalayan blackberry and English ivy."

Recent and Current Projects

The nursery moved to its present location on Golden Gate National Recreation Area land near Olema, CA, at the site of the Turtle Island Restoration Network headquarters, in 2008 and has organically grown in sophistication each year as SPAWN has grown in scope and size. Audrey Fusco was hired to manage the nursery in 2016. Over the past 7 years SPAWN completed more than 15 acres of habitat restoration work thanks to large-scale projects funded by California Department of Fish and Wildlife Fisheries Restoration Grant Program, California State Water Board, NOAA National Marine Fisheries Service Restoration Center, and the members and volunteers of Turtle Island Restoration Network (SPAWN's parent organization).

Nursery infrastructure has been upgraded, and present infrastructure includes tables throughout the nursery



to house plants, cages throughout the shadehouses to protect seedlings from rodents, storage racks for clean pots, an enlarged bin to store fresh soil, a solar-fan to cool the greenhouse, a solar oven used to sterilize pots, and other innovations. Much of the labor and materials for the nursery upgrades were donated to the nursery by volunteers and interns. We utilize recycled materials as often as possible.

Plants grown by the nursery are utilized for a wide variety of purposes and are planted in small and large-scale riparian restoration projects, school gardens, and home gardens. SPAWN has initiated many new programs, including school propagation programs (seaturtles.org/ spawn-education), a Tropical Milkweed Trade-out/Native Milkweed Give-Away program (tinyurl.com/tropicalmilkweed), and 10,000 Redwoods (seaturtles. org/10000-redwoods). Additionally, since 2020 we have collaborated with Home Ground Habitats Nursery (www. homegroundhabitats.org)on a school garden program called Bringing Nature to School (tinyurl.com/naturetoschool). We assist local homeowners who want to restore their land by planting natives and have made plants available to our partner agencies restoring habitat in the Lagunitas Watershed. We often invite groups to see what we have created, and we are

always willing to share our expertise. We continue to develop new educational materials to share with others.

SPAWN Nursery is a place where people come together to learn how to grow native plants and restore land to create habitat for wildlife. Volunteers still meet each Friday to propagate plants and maintain the nursery. We often meet for activities such as bird walks prior to nursery volunteer events, celebrate birthdays within the community, and eat lunch together each Friday. The nursery is a unique community-based project that depends on the support of hundreds of volunteers, interns, and students who contribute their time and energy to the propagation and care of native plants. The volunteer community provides our foundation of support for taking action to rebuild beneficial habitat for wildlife in the Lagunitas Creek watershed and the greater Marin County area.

Lessons Learned

- Where there is a will there is a way. Don't let a lack of dedicated resources stop you from getting the ball rolling. Building a diverse and vibrant community attracts resources that may extend beyond your immediate imagination. Do the work and the resources will come!
- Find experts to mentor your group. Plant-loving people are some of the most generous people on Earth and are usually willing to share their knowledge.
- Make it fun! Work becomes play when you put together the right group of people who want to help make their communities a healthier place. Don't forget to include food—everyone loves a potluck.
- Empower volunteers. Most people rise to the occasion if you encourage them. Don't be afraid to ask for their ideas and help. Before long they not only become the experts, they help find and provide the resources to take operations to a higher level.
- For more information: seaturtles.org/spawn



Nursery Volunteer Celebration, July 2023

The Roots of Cooperative Management

By Michael Evenson

With the formation of the Trees Foundation in 1991, founding directors Rick Klein and I sought a path for forest communities to continue to work in the woods while "restoring ecological functions," terminology that changes with the times, but means healing from the outrageous disturbances of the past. The path to achieve this was not direct, but it cleared the way for so much of the groundbreaking work being done today.

This story began to unfold in the early '90s when Rick's son played soccer in Arcata. On the sidelines of those games, Rick happened to strike up a friendship with a woman named Martha Ketelle. She was then Supervisor of Six Rivers National Forest and their conversations developed into her inviting Rick to work with her to find a new way through the gridlock of the Timber Wars. Rick pitched the idea of cooperation at an early Trees board meeting and I volunteered to pursue the interaction with Ketelle. This chance meeting coincided with President Clinton launching an initiative to quell the Timber Wars called the federal Northwest Forest Plan. It addressed the imminent threat to endangered species, led by the fate of the Northern Spotted Owl impacted by oldgrowth forest destruction. The Timber Wars were inflamed by individuals being pitted against each other in timber and environmental communities, and that federal plan also began to address the long-term denial of the cultural rights and knowledge of sovereign tribal nations.

The U.S. Forest Service Collaborates with the Karuk Tribe and Trees Foundation

Ketelle invited me to join with Robert Rohde from the Karuk Tribe to determine where we could all collaborate. What followed, through negotiations, was the



A meeting of the minds: Michael Evenson (top photo, 2nd from right), John Larson, USFS (bottom left) Robert Rohde, Karuk Tribe (bottom right.) All photos this article courtesy Michael Evenson

very first Memorandum of Understanding (MOU)in June 1993 between the U.S. Forest Service, the Karuk Tribe (a federally recognized tribe), and Trees Foundation (an environmental non-profit).

Karuk Tribal Chairman Alvis Johnson was gratified that the Karuk could finally exercise management over some part of their extensive ancestral territory that the USFS had been abusing. Their territory was nearly all within the boundaries of National Forests. The administering federal bureaucracy had no incentive to listen to cultural imperatives for use of the lands. But now, with the MOU, cultural burning in Red Cap Creek could commence to release old oak stands from the threatening Douglasfir invasion. Burns were planned by the basket weavers to facilitate the collection of suitable materials. The plantations that followed widespread clearcutting could be thinned to nudge the landscape back

into the diverse forest that existed before logging and the Douglas-fir monoculture was imposed.

Natural Resources Manager for the Karuk, Rohde commented that he never thought he'd see the day when the Forest Service would take the Tribes' interest seriously and allow them a seat at the table to propose projects and participate in decision-making.

The partnership was productive. Representing Trees Foundation, I was instructed in historical and legal issues that faced the Tribe. Showing up for the Tribe whenever needed, I met with tribal members, and learned from conversations, meetings, historical records, and relevant legal decisions. Leaf Hillman, then Director of the Karuk Natural Resources Department, entrusted me to represent the Tribe in the Klamath Province Advisory Committee



TREES FOUNDATION

is recognized for outstanding accomplishments Through cooperation with and support to the citizens and partners of the Orleans/Somes Bar communities to revitalize their economy while maintaining their rural lifestyle.

Jack Ward Chomae

established by President Clinton to resolve administrative and resource issues among the various public agencies (USFS, NOAA Fisheries, U.S. Fish and Wildlife, National Parks) and the Tribes, timber communities, County Supervisors, the general public, and environmental advocates. The Karuk also sent me to Washington, DC to meet with federal officials there to expand the Tribe's role in stewarding the lands. A governmentto-government relationship is the basis for interaction, as such, it is a meeting of equals. These meetings laid the groundwork for improved trust between the Karuk Tribe (a sovereign nation) and the United States.

The MOU was a working framework used by the Tribe to further cultural management of federal lands. In 1994 Robert Rohde wrote to the federal team, "We are hopeful that the Watershed Analysis Work Group will recognize that through Vision 2020 we have already begun to develop a prototype for watershed analysis on federal lands." Our Congressman Dan Hamburg lent his support for the work of Trees Foundation to continue participation in the partnership.

The work of a community

partnership

comprising Six Rivers National Forest, the

Karuk Tribe, the

Garberville-based

Trees Foundation,

Somes Bar Chamber of Commerce

(Humboldt/Siskiyou counties) was

acknowledged by the

U.S. Forest Service

in 1995.

and the Orleans-

In 1995, Trees Foundation received Forest Service Chief Jack Ward Thomas' Award "In the Spirit of Working Together for Rural America." Trees Foundation was "recognized for outstanding accomplishments through cooperation with, and support to, the citizens and partners of the Orleans/Somes Bar communities to revitalize their economy while maintaining their rural lifestyle." The Award carried with it funds to further the work. In 2023, the U.S. government finally relinquished ownership of some of the Tribe's most important sacred sites: Panamenik, Katimin, and Inam.

North Coast League's Vision 2020 Project Was "New" Foresty in the Old Days

Today Cooperative Management is mandated by Governors Brown and Newsome's Executive Orders. Leaf Hillman is currently co-chair of the North Coast Resource Partnership (NCRP) which approaches land management issues collaboratively with tribes, agencies, and local governments, by directing funding to projects. NCRP works closely with CAL FIRE to increase cultural fire opportunities. Karuk Tribe's Kathy McCovey, a USFS employee, is leading the way to bring practitioners of burning together and accelerate the use of prescribed fire throughout the region. The Karuk Tribe Natural Resources Department, led and staffed by young tribal members, is empowered to engage as equals with the USFS to incorporate Traditional Ecological Knowledge throughout their ancestral territory.

Trees Foundation, from its inception, was at the forefront promoting management practices that embrace cultural stewardship for the health of the forest, the people, and the land. In the ensuing decades, government agencies and public entities have joined the movement to support Indigenous land stewardship.

This work is rooted in respect for each interest and the deeply held values based on regional knowledge, collaboration, and survival—in essence learning from the past to improve our future.

For more information: lostcoastleague.org

The Virtues and Limits of Collaboration Piercy Volunteer Fire Department

By Jeffrey Hedin, Commissioner, Piercy Fire Protection District

"Cooperation, Collaboration, and Communication;" add Coordination and it's a perfect title for a report from Piercy.

I first heard enviro activists promoting collaboration during a North Coast Resource Partnership (NCRP) conference at the Bear River Tribe's Community Center in Loleta, CA. The presenters stressed that since catastrophic disasters have no respect for political boundaries, we have to collaborate to respond effectively. Less than two years later I feel double dipped, triple dipped, saturated, almost hog tied with collaboration and the need for it. But not because Piercy had no prior experience with collaboration.

From Fledgling to Flying

For over 20 years our Volunteer Fire Department has responded mutually with Leggett VFD, and when called, with 10 other VFDs in the border area between Humboldt and Mendocino counties. Recently, after meeting with state senator Mike McGuire, our twelve departments chose a committee from among their chiefs to analyze our needs and propose a budget to utilize \$2 million to improve coordinated regional response. Within two months they chose the gear they wanted and whom to order it. Long working acquaintance and shared vision and goals make collaboration smooth.

Without that acquaintance, simple human diversity has made our other collaborative efforts more complex, even when working in Piercy on Piercy's needs.

Piercy got its name when local residents wanted a post office. When the county line was finally surveyed, a third of the Piercy Postal District was in Humboldt



Inside the PFPD Fire Station Photo by Larry Casteel

County, the rest in Mendocino County. During the tan bark to split stock* to logging/milling to marijuana boom times, no one cared. Cash covered crises. Post boom times we became a fire district that did not include all our postal district, a postal district without a post office, a commute community without a school. Children were bussing both north and south to different school districts, with no safe place for our bussed children to wait for their parent, we had no emergency shelter, and our volunteer fire department was trying to maintain a response team with no local employment. We even commuted to vote and to buy stamps to pay our taxes.

The teams struggling to keep our Community Hall, VFD, and Fire Protection District from total collapse began to share resources to maintain basic community services. When our fire station flooded, we insured the Community Hall for emergency response training, slowly diverted the flood waters from our fire station, built an office inside it, and started to look for grants. We were ad hoc collaborating without using the term. Ideally planned collaboration will be easier.

At first we simply appealed for help to continue to provide emergency response to local residents inside and outside our district, to travelers on Highways 1 and 101, and to visitors in our state parks and BLM recreation areas. Later we asked for help because human

^{*} Split Stock is generally railroad ties, fence posts, fence railings, shingles, etc. split out of trees, usually where the tree was felled. In Piercy, the trees being split were redwood. Occasionally Douglas-firs were split for local use. Hammers, wedges, and froes were the basic splitting tools. The products were moved out of the woods on carts or pack trains, then floated down the South Fork and Mainstem Eel rivers on manned log rafts for regional sales or shipping south on coastal freighters.



One of the Piercy VFD's fire trucks lit up for the Garberville Christmas parade. $\mathsf{P}\mathsf{Hoto}$ by Jasha Mae

health and environmental health are so interdependent that they must coevolve. A healthier Piercy would do more for a healthier environment. A series of grants from Trees Foundation and the Mendocino Community Foundation have let us get our two core buildings (the Community Hall and fire house) back into nearly full repair by attracting willing doers and donors. Our event calendar at the hall is fuller; our core team is growing bigger; and at least we agree that the hall must qualify as a fully equipped emergency shelter as soon as possible. But 10 years or more into our recovery we are still not a well-coordinated team.

And as we reach out to "collaborate" with other organizations, we find that intentions do not create coordination.

The Piercy Fire Protection District collaborated with the Mendocino County Resource Conservation District, the Redwood Forest Foundation, Inc., and the Arcata District of the Bureau of Land Management to secure a \$5 million grant to put shaded fuel breaks on nearly 1,300 acres in and around our district. After working on nearly 600 acres, we are still trying to get four contractors and their teams and thirteen land ownerships to share a vision of increasing fire resiliency on our landscape while maintaining ecological functions. This includes biodiversity, soil creation and retention, rainwater absorption, and food for pollinating and composting fauna. We also want to keep our recreational appeal so that maintenance of the fuel breaks is more like a walk in a park than a scramble through an obstacle course. We're even trying to generate vocabulary: "Let's call this Eco Services Forestry."

Collaborating with the Mendocino County Office of Emergency Services to create a county-wide evacuation plan has, through tremendous effort by our Public Information Officer, resulted in a great plan for our district, but I have yet to see a county-wide plan.

We continue to try to work with the Mendocino County Association of Fire Departments, the NCCOAD (North County Community Organizations Active in Disaster), and many other worthy acronyms. Sometimes I feel like being the firstest with the mostest collaboration is the new playing ground for cosmic oneupmanship, and I can't keep up.

I don't wish to discourage participation. Collaboration helps, and it draws support. Go for it. But don't expect a panacea. These grants do not buy solutions to problems. Every thing evolves. The grants are a down payment on a sustainable relationship with nature.

Maintenance, Maintenance

Collaboration is not widely practiced in the U.S.A.. We can't even get nighttime drivers to dim their lights for oncoming traffic. Be patient. Coordination takes time, practice, and a form of intimacy. It's an improv dance.

Thank every effort. Enjoy any progress, and celebrate it.

For more information: www.piercyfire.org



Jasha Mae of KMUD interviewing (I to r) Jeff Hedin Larry Casteel, Pat Landergen at the Piercy Community Hall which is being cleaned after their Spring Breakfast. PHOTO BY JOSH GOLDEN

Trees' Indispensable Role as a Non-Profit Incubator

By Pat Higgins, Eel River Recovery Project Managing Director

In Spring of 2011, I went to the Trees office in Garberville with my old friend Paul Trichilo, and we met with Trees staff Barbara Ristow and Jeri Fergus and Board member Bill Eastwood. I had been contracting with Friends of Eel River (FOER) trying to estimate the Eel River fall Chinook salmon population, and many people I met with at the grassroots level expressed an interest in participating in volunteer monitoring. FOER didn't have funds to support such work, so we were turning to Trees to see about founding a separate organization focused on monitoring. Barbara, Jeri, and Bill were all highly encouraging, and Bill suggested Eel River Recovery Project as the name.

We wrote a monitoring plan and began getting small grants as a fiscally sponsored group of Trees. Patagonia gave us grants for fish monitoring, and Rose Grassroots grants helped support temperature monitoring and organizing through a series of Water Day meetings from 2012 to 2015. Trees staff made posters for



"Paying attention acknowledges that we have something to learn from intelligences other than our own."

Robin Wall Kimmerer

events and pitched in to help substantially in supporting our large-scale events. Jeff Hedin and Bruce Hilbach-Barger brought in Rose Foundation Wildlands grants and formed an active Wilderness Committee that helped clean up several cartel grow sites in and around the Red Mountain Wilderness Area.

The Rocky Road to Recovery

By 2016, ERRP had outgrown its sponsored group relationship with Trees, and we became our own 501(c)3 nonprofit corporation, but not before Trees had administered over \$100,000 in grants that supported our activities. We were able to receive grant funding without having to go through the expense of incorporation. Instead we could "just do it," with Trees receiving grant funds, performing administration, and doling out the resources to ERRP contractors as we performed the work. Barbara at Trees was like our fairy godmother, but she practiced tough love and helped guide us along the way.

I can truly say that ERRP would have never formed if it were not for Trees Foundation. The role they play as an incubator for fledgling non-profits is a unique one, and our time as a sponsored group had kind of a magical quality. We are now administering millions of grant dollars, which is like a dream come true.

For more information: www.eelriverrecovery.org



Second ERRP retreat at Emandal in October 2012. PHOTO COURTESY ERRP



The Eel River Recovery Project Report South Fork Eel River 2023 Pikeminnow Survey Provides Encouraging Results

By Pat Higgins, Managing Director, Eel River Recovery Project

The Eel River Recovery Project (ERRP) conducted its eighth annual survey of invasive Sacramento pikeminnow on the South Fork Eel River from Rattlesnake Creek to Standish Hickey State Park on June 28 and 29, and results were surprising. The invasive pikeminnow population was far lower than the previous three years, and native steelhead trout were more abundant than any year since surveys began in 2016. The dive team was led by University of California-Berkeley postdoctoral researchers Phil Georgakakos and Gabe Rossi, who were joined by undergraduate students and fish biologist and ERRP Managing Director Pat Higgins for the two-day, 12-mile survey.

ERRP began the pikeminnow surveys at the recommendation of Dr. Bret Harvey, who did extensive studies of pikeminnow



UCB divers after lunch on Day 2 (I to r): Phil Georgakakos, Gabe Rossi, Jim Greenberg, and Rachael Hein. All PHOTOS THIS ARTICLE BY PAT HIGGINS

in the Eel River for Redwood Sciences Lab, a research branch of the U.S. Forest Service. He noted that the upper South



Rattlesnake Creek, where the ERRP survey begins, spilling into the South Fork Eel River below BLM Wilderness Areas.

Fork was a major producer of Chinook and coho salmon and steelhead trout, but that large pikeminnow predation (on salmonids) could be limiting their populations. From 2016 through 2019, the population of pikeminnow greater than four inches in length oscillated between 614 and 1,414, increasing dramatically in 2020 to 6,639 due to favorable conditions afforded by record drought. The population maintained high levels at 4,075 and 3,867 in 2021 and 2022, respectively, but dropped to 1,164 this year.

High flows like those experienced the previous winter showed co-relations with reduced numbers of smaller fish (<8"), but the number of large adults was low. The reason for the decline of larger fish may be related to new cooperative efforts by UCB, CalTrout, the Wiyot Tribe, and the California Department of Fish and Wildlife (CDFW). In addition to setting up a weir on the SF Eel near Piercy to trap adult pikeminnow during seasonal migrations, UCB and the Wiyot can use nets and spears to remove them. During the 2023 survey, eleven large pikeminnow were speared during the two-day dive, and dozens more after UC divers returned to reaches where we had seen concentrations of adults.

Before the dive team hit the water on day one of the survey at Rattlesnake Creek, dimples on the surface indicated active feeding by rainbow trout or steelhead juveniles. Flows were high enough during the 2023 survey that divers could float through many riffles, which is much more fun than rock-hopping during dry years. Moving downstream through riffles and cascades, the team would knock insects off rocks, driving the trout into a feeding frenzy. Amazingly, the UCB team was able to count salmonids as well as pikeminnow, and they found there were 2,375 trout from 2" to 16" in length. Small young of the year fish comprised only 436 of the total, so the vast majority of fish were yearlings or older, with the largest fish likely resident trout.

Winter flows needed for successful steelhead spawning were lacking in 2020 and 2021, and ocean conditions may be changing, resulting in lower adult returns. Luckily steelhead and rainbow trout are the same species and capable of adopting a sea-going or anadromous life history or remaining in freshwater as resident trout. It is possible that residents are helping maintain a high population level. Also, flood flows in tributaries, like Tenmile Creek near Laytonville, in the previous winter appear to have caused low survival



Typical steelhead or native trout in reach below Cedar Creek.



Jason Shaffer shot six large pikeminnow on day one.

of eggs and fry, but they may also have washed rearing steelhead juveniles and resident trout downstream and into the main South Fork.

Large areas of intact watershed upstream of the dive reach in the UC Angelo Reserve and the Cahto Peak and Elkhorn Wilderness Areas produce copious amounts of cold water and low sediment levels, which make the South Fork Eel River ecosystem in this reach highly productive even during droughts.

While it is too soon to tell whether reduction of large adult pikeminnow is responsible for the upswing in trout standing crops, this hypothesis can be tested by continuing to collect trend data in the index reach. To learn more or volunteer for the 2024 survey, call (707)223-7200.

The Eel River Recovery Project works to assist citizen monitors with taking the pulse of the Eel River and to collaborate to craft and implement ecological restoration stratagies. For more information: www.eelriverrecovery.org



THE DISQUIET REPORT: Missives and Musings from Chad Swimmer

Keeping Timber Harvests Out of Jackson State Forest

Over the last three years, coordinated community action has successfully stopped a number of timber harvest plans (THPs) in Jackson—California's largest state forest. Two of the blocked THPs had been submitted, one was approved and sold to a mill, and others were under development. The total area saved by the work of the Coalition to Save Jackson exceeds four square miles. The halting of these plans represents a shining example of what citizens can do when we work together.

All the area saved has a long history of heavy use by locals for walking, mountain biking, equestrian activities, mushroom foraging, and just relaxing.

I put together this photo essay to highlight the unique and extraordinary beauty of so-called Jackson. (I say "so-called" because why must we use the name of the first timber baron responsible for the forest's destruction?) The defeated THPs are described in the captions. The areas are left alone for now, but permanent protection is still lacking.

Enjoy the photos!



The Gemini Tree, site of a mother/daughter treesit, with activist and organizer Michelle McMillan arranging her flower lei. The Caspar 500 THP was approved in the Spring of 2020, just as the pandemic was first ravaging the country. It was sold to a mill and subcontracted to a licensed timber operator, who attempted to start logging in June of 2021, but the destruction was put on hold by direct action and civil disobedience—including two tree-sits and numerous lock-downs, led first by local youth, young adults, and long-time forest activists. Continued action on legal, procedural, and community fronts led to the eventual expiration of the timber sale contract, which now is not likely to be renewed without substantial modification

(though it seems that most mills are loath to step into the fray). Saved for now! PHOTO BY CHAD SWIMMER







Mitchell Creek and Little North Fork Big River: These two THPs were submitted in 2020 and were immediately hit by hundreds of public comments. These exhaustively researched complaints were from groups and organizations such as EPIC, the California Native Plant Society, the Coyote Valley Band of Pomo, the Audubon Society, the Sierra Club, the Mendocino Woodlands Camp Association, and others. The gravity and authority of these comments combined with the threat of more direct action gave CAL FIRE pause. The plans languished in "director's decision" phase for 16 months, after which they were finally withdrawn. PHOTO BY JAIME ARMSTRONG



A young spotted-owl with a tree vole. PHOTO BY JON KLEIN

Rhododendron occidentale Photo by Art Mielke

Chad Swimmer is an activist, educator, and, at the moment, radio programmer whose shows can be accessed at www.disquietpride.buzzsprout.com.



Medicinal turkey tails, *Trametes versicolor* Photo by Chad Swimmer

Jughandle and Railroad Gulch: These two THPs were abandoned before being submitted, after it became clear that they would face the same level of opposition as the Mitchell Creek and LNF Big River plans. Railroad Gulch was especially problematic, as it contains an area known as Mushroom Corners, a square mile extensively documented by researchers over three decades to host at least 845 species of ectomycorrhizae. Like the LNF Big River Plan, Railroad Gulch is in the Mendocino Woodlands Special Treatment area, a five-square-mile area that, according to the terms of its transfer into the bounds of Jackson, was expressly intended to not be subject to commercial logging. Huge victories! PHOTO BY JP O'BRIEN





PLANT NOTES Pacific Reedgrass in the Garden Calamagrostis nutkaensis

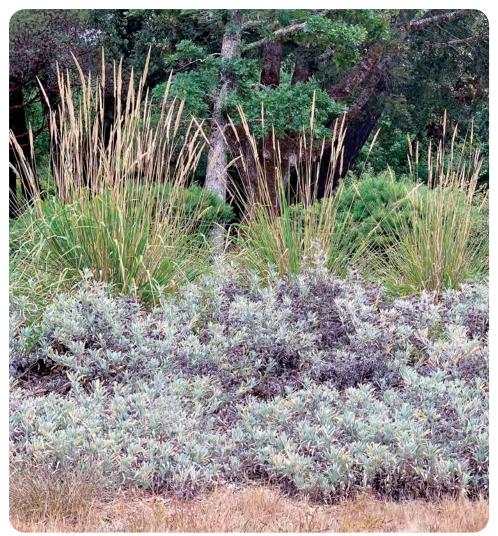
This article was adapted from an article written by Cheryl Lisin for the journal Grasslands, Vol. 33, No. 1, *Winter* 2023

Pacific reedgrass is a large, showy perennial bunchgrass that ranges from Alaska to Central California, where it grows along the coast as well as in the mountains of the Coast Range. It is an attractive, low-maintenance, droughttolerant evergreen grass for your landscape and is host to butterflies and moths. It also provides habitat for lizards, salamanders, and small mammals.

My first experience with growing Pacific reedgrass was 15 years ago when I purchased 60 plugs from the California Native Plant Society, North Coast Chapter. They were grown from seed collected in Redwoods National Park. Back then the Chapter didn't have a nursery—the plugs were sitting around someone's backyard, getting rootbound, so I got a good deal on them!



Pacific reedgrass growing on the author's leachfield, in full sun.



Pacific reedgrass grown in full sun with no water is a nice addition to the drought tolerant garden.

My garden is four miles from the Pacific Ocean as the crow flies, but there is a mountain range in between, and summers here are hot and dry. I figured I'd better plant my new Pacific reedgrass plugs in the shade and chose a spot beneath a big canyon live oak, *Quercus chrysolepus*, which is mostly dappled shade. I planted them during the rain in early November and have never watered them since. They rooted right in and have looked fabulous all these years. Every once in a while I'll de-thatch them with a rake, but have never had to cut them back to rejuvenate them.

Several years later, I bought a cultivar of Pacific reedgrass called 'The King', collected by Roger Raiche in the King Range, right next to where I live. It has wider blades and is a little larger and more robust than the straight species. I decided to try growing it in full sun and planted it on my leachfield, thinking it would appreciate the water. Being a thrifty



The author's original planting of Pacific reedgrass in the partial shade of an oak tree. All photos were taken in late summer, before the rains. All photos this article by Cheryl Lisin

person, I divided that plant up and planted several divisions of it. It has thrived on the leachfield ever since, reaching 3 feet all around (taller when blooming) in a short while. Every 3 or 4 years it starts to look a little thatchy and its vigor declines, so in early winter I chop it back almost to the ground. I use hedge shears for this (which work great), but I have learned to shake the plant and make a ruckus before chopping, in an attempt to scare any critters away; I once chopped a salamander in half, which was a pretty horrible thing to do. It is easy to make divisions of Pacific reedgrass, and I had several of these in pots, so I decided to try planting them in full sun with no supplemental water. These have surprised me with how great they look year round, staying green and lush-looking even without water.

The one regular maintenance task I do on all my Pacific reedgrass is to cut the flower stalks off when they start to look untidy, usually in winter. Whether you have sun, shade, water, no water, Pacific reedgrass is easy to grow and a great addition to any Northern California landscape.

Cheryl Lisin is a native plant enthusiast, landscape designer, and Vice President of Friends of the Lost Coast, whose mission is to inspire passion for nature in the Lost Coast Region. She is currently working on a native plant garden at the King Range BLM office for the education and enjoyment of all. You can contact her at Cheryl@lostcoast.org.



SALAMANDER ILLUSTRATION BY MAUDE TURPIN



Living with Fire Native Health in Native Hands Organizing for a Changing World

By Serenity Wood

During this era of ecological crisis, how do we return more stewardship of the land to Indigenous peoples? Tribal cultural revitalization and environmental protection efforts are working towards this goal in Southern Humboldt through Native Health in Native Hands.

"Awareness, love, compassion, and gratitude is what we are all feeling as we teach each other," says founder and executive director Perry Lincoln. His collaborative bridge-building efforts bore abundant fruit in 2023. "In one year," he smiles, "we have agencies, locals, and Native people working and planning together."

Native Health in Native Hands supports community connections to ancestral homelands, arts, languages, and culture to accomplish Indigenous healing. Perry Lincoln has Kinest'e (what Wailaki people called themselves in their own language before first contact), Yuki, and Pomo ancestry. Lincoln is working to boost Native access to traditional ecological knowledge, which was used to caretake the land for millennia. He believes we should extend our sense of community to include all life formsplants, animals, human beings, rocks, and rivers-for a politics of place where we are deeply accountable to our communities, our neighborhoods, and our home. Lincoln hopes to inspire others so we can change our conceptions of the land from ownership to commitment. He insists that we carry a reciprocal responsibility to protect and nourish our environment and surroundings: "All the human beings have an obligation to work with the land, for the land. And in return, the land provides for us."

In honor of matrilineal Native societies, and with support from Trees Foundation



Round Valley Feather Dancers at the Mateel Community Center on February 18, 2023, with Diana Totten, Cultural Fire Advisor, in the background. PHOTO BY JAMES FICKLIN-WOOD



Ernest Lincoln, Youth Leader in Training, at a cultural burn in SoHum Park on 10/19/23. Photo by Perry Lincoln

and other partners, Native Health in Native Hands hosted an all-Nativewomen panel at Redway's Mateel Community Center on January 15, 2023, to educate the community about the need to bring back Native-led "N-Shong Konk" or "good fire" in our region. Fire is essential to a diverse, healthy ecosystem of understory vegetation. However, using fire in a beneficial way is a sensitive process given the past 150 years of fire suppression. Cultural fire experts Diana Totten, Margo Robbins, Kathy Mccovey, and Elizabeth Azuz described fire as a cleansing tool, subtracting fuel and invasive species, but also a creative tool, adding better habitat for animals.

So what sets cultural fire apart from prescribed burning? According to the panel, cultural fire is a richer, more long-term ecological commitment to ALL native plants—used by both humans and wildlife. Cultural fire seeks not just to reduce, but enhance, creating better quality basket materials, sustainable food sources, and habitat. For millennia, they explained, Native Americans shaped and renewed the land through fire. Fire was regularly used to transform fuels into nutrients for the soil, augmenting foraging conditions and pasturage. Varied and localized habitat burning increased the depth of the topsoil, feeding plant communities and associated animal species.

At the January 15 event, event organizer Perry Lincoln emphasized cultural burning as a nurturing force. Good fire does not just do good to the landscape as a commodity, but for the land as a living, creative being. Kathy Mccovey, renowned basketweaver and cultural resource specialist from the Karuk tribe, demonstrated how people could, with the help of fire, enhance the success of elk populations by encouraging open visibility in the woods and abundant forage on prairies. "You've got your village site, and around it, the women burn a twomile donut for a fine-grain mosaic," she explained. "That's for your oak woodlands and grasslands. That's where we get our medicine plants... teas, berries. A lot of times when you burn through this oak woodland you'll encourage those base sprouts to come out, and the elk and the deer love to nibble on that. If you manage for them, they will come."

Bolstered by the success of the first panel, Native Health in Native Hands hosted another N-Shong Konk "Good Fire" event on February 18 featuring



Perry Lincoln at the first Wailaki cultural burn in over 150 years in Southern Humboldt at the Southern Humboldt Community Park. PHOTO COURTESY PERRY LINCOLN

many community voices. Kathy Mccovey spoke again after Diana Totten, a seasoned firefighter with Wintu heritage. Another speaker was Perry Lincoln's granddaughter, Xa-t'le T'sing (pronounced Hot-let Sink) Lincoln, who also goes by the name Star. Though Star is well-trained in western firefighting techniques, she clarified that "firefighter" is "a misleading term" for her objectives. Cultural burning was outlawed until only about a decade ago, but thanks to advocates such as Margo Robbins, Elizabeth Azuz, and the Cultural Fire Management Council, "we are working with, rather than against, fire," said Star.

In June, Native Health in Native Hands helped a dozen Native community members become certified Firefighter IIs. This training supplemented a newly designed fire-lighting class spearheaded by Diana Totten the month prior. Titled "Cultural Fire Behavior Training," this course was of the first in the country to provide nationally certified S-190 firefighter-foundations training specifically incorporating traditional ecological knowledge.

I attended "Cultural Fire Behavior Training" as a student. Counter to the typical, death-by-PowerPoint beginning firefighting course experience, it was taught outdoors, expanding across the landscape as its classroom, with Perry Lincoln's points underscored by birdsong. When students asked about the importance of timing when burning different grassland ecosystems, Perry asked everyone to pay attention to who was nesting-"quail, grouse, killdeer, sandpiper, cranes." He spoke movingly, with a tenderness born of his connection to place. "These birds, protecting their nesting places," he implored, "how are we relating to that? That relationship, noticing the communities where we're at, will help the animals to come back again." For Perry, burning is made beneficial via intimate knowledge of the landscape.

Food Sovereignty Event at the Mateel

On April 28, 2023, Native Health in Native Hands hosted its third event of 2023 at the Mateel Community Center in Redway with the focus on uplifting traditional ecological knowledge. Perry Lincoln, founder and executive director of Native Health in Native Hands invited Indigenous rights activists, musicians, and educators Lyla June and Desirae Harp to help answer the questions, What is food sovereignty? How does it relate to the Landback movement, as well as recent efforts by Native Health in Native Hands to cultivate "Good Fire" in Southern Humboldt? Dr. Lyla June is an internationally renowned public speaker, poet, hip-hop artist, and acoustic singer-songwriter of Diné (Navajo) and Cheyenne lineages. Her message is centered on intergenerational and interethnic healing, as well as an urgent, vibrant articulation of Indigenous philosophy.

Lincoln began by thanking Lyla June for her service to his Kinest'e people: "We're reaching out—bringing people here to our homelands to share with us, because we've always been a people that helped each other."

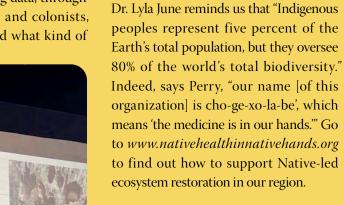
June responded, "You know, they say that history is written by the victors. But how can there be a victor if the war isn't over? Creator is sending her very best warriors and they're coming right now to Earth to help us at this time. And in this battle, the only weapons we have, and the only weapons we need, are truth, and faith, and compassion. I'm honored to be a warrior with you all to help heal our Mother Earth." This event had two distinct components. First, Dr. June performed an incredible spoken-word musical set before presenting her Ph.D. dissertation, titled Architects of Abundance: Indigenous Regenerative Food Systems and the Excavation of Hidden History (this text is open-access and available online!). Her research focuses on ways in which precolonial Indigenous nations actively "gardened" the land on regional scales to produce abundant food systems. She asserted that we can "transform from the role of a leech, to the role of a keystone species that augments and supports all life around us."

Dr. Lyla June's work aims to help the world appreciate the depth of knowledge of Indigenous people within land management, and value their leadership. She expressed another part of her mission at the Mateel—to help "reeducate" her own people, including her "cousins," as she affectionately called her Wailaki audience, since Kinest'e people also speak her Athabaskan language. "A lot of us as Indigenous peoples," she explained, "went to the boarding



Dr. Lyla June with Perry Lincoln (third from right; third from left), Desirae Harp (far right), and others at the Mateel Community Center on April 28, 2023. PHOTO BY LYLA JUNE

schools. Our parents and grandparents went to the boarding schools. And a lot of our traditional knowledge was lost. And so, what I've been trying to do is to excavate through fossilized pollen records, through tree-ring data, through the diaries of explorers and colonists, what did we do here and what kind of



Serenity Wood is a fifth-generation Southern Humboldt citizen from the Alderpoint area. She graduated from Cal Poly Humboldt with majors and minors in English, Communications, Art, and Sociology. She is currently waitressing at the Woodrose, working as a Literacy Specialist at Casterlin school, and taking EMT, firefighting, and prescribed burning courses. As a reporter for KMUD News and a Certified California Naturalist, her passions include local ecology and community efforts to cultivate good fire in Southern Humboldt. She can be reached at serenityaleta@gmail.com.

creations did we manifest through our

relationships with the land? To illustrate

the ways in which Indigenous peoples

had a profound influence on the way the

land looked and the way the land tasted."

Diana Totten discusses fire's effect on oak groves, a crucial food source. An uncared for oak grove, like the ones we have now after over a century of fire suppression, generally yields acorns riddled with pests that render them useless. The seasonal Indigenous wisdom about oak groves is that the underbrush must be burned in late summer or early fall when those first wormy acorns have fallen. Burning the underbrush of the oak grove kills most of the worms that would have turned into moths the following spring and reproduced to lay their eggs on the next acorn crop, and the burning clears the ground so the acorns could be more easily gathered when they fell. A good harvest depends on this proper preparation by prior burning.



Diggin' In The Richard Gienger Report

There's been time for a lot to happen between the Spring 2023 edition of Forest and River News and this Fall/ Winter 2023-24 issue. This column will be a little longer than usual, and I'll have to dredge my memory and hope key issues are covered. All FRN contributors are being encouraged to emphasize instances/examples of "cooperation, collaboration, and communication" in this issue, which I will try to do with both the past example of the establishment of Sinkyone State Wilderness & InterTribal Sinkyone Wilderness and the current example of struggles for true generational stewardship and Land Back/ Co-management. There's a bunch in between, of course, and I can't help but bring up the all-too-common context of "chaos, conflict, and circumstances," the dire-type.

Saving the Sinkyone: From Chaos to Cooperation

The struggle over the Sinkyone Wilderness Coast has been a topic in many issues of *Forest and River News*, most recently in Spring 2023. Emerging out of the chaos, conflict, and circumstances of Georgia-Pacific's (GP) attempt to liquidate all oldgrowth and merchantable trees starting in 1975—with the California Department of Forestry's (CDF, now known as CAL FIRE) approval of timber harvest plans was the Appeals Court ruling in 1985 (EPIC v. Johnson) and the acquisition of 7,800 coastal acres in 1986.

CDF approved an entry timber harvest plan (THP) in 1977 in what became known as the Sally Bell Grove watershed, constraining the obliteration to be conducted in stages instead of all at once. Every ounce of cooperation, collaboration, and communication was engaged in the fight to stop the logging of the Sally Bell Grove. Hundreds of people and multiple



Surviving the "Timber Rush"—The Sally Bell Grove, before and after Georgia Pacific destruction.

organizations had steadily advocated for years, in many venues, for protection for the whole affected coast—THP after THP—culminating in outrage over the THP to remove the old-growth grove with a 75-acre clearcut. A strong lawsuit was filed in the Fall of 1983 against CDF/GP by the Environmental Protection Information Center (EPIC) and the International Indian Treaty Council. Non-violent civil defense of the Grove was repeated until

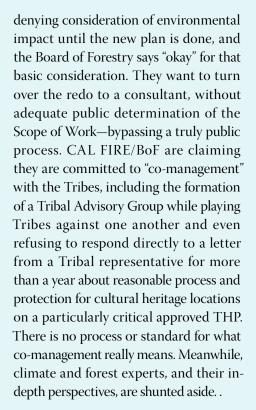
the California Appeals Court granted a Stay on operations. The decision came in the summer of 1985: CDF was required to (and did not) consider cumulative impacts, adequately consult with California Indians and Tribes, adequately ensure that Native American Heritage was being protected, and follow public review process requirements. GP resubmitted the same plan with only the date changed. The second litigation commenced, but the Trust for Public Lands stepped in, and about 7,800 acres were acquired in December 1986 from Georgia-Pacific. Contention continued over partition of the acquisition into protected areas and "multiple mechanized uses."

The InterTribal Sinkyone Wilderness Council was founded in the mid-1980s. With incredible perseverance and strong public support, this group eventually acquired over half of the 7,800 acres and established the InterTribal Sinkyone Wilderness. Most of the rest became part of the California Wilderness System, with two smaller areas becoming part of Sinkyone Wilderness State Park. Many players collaborated over the years to protect the forest and put the acreage in Native hands and the park system.

Now, here we are in the present, and I have a long list of issues, events, and history I aspire to cover; much will have to be very brief and some held over for my next column. I do want to make sure that there's enough there to give substance and background to our condition and the need for an arduous but positive coming to grips individually and collectively in the present and the future.

Jackson Demonstration State Forest

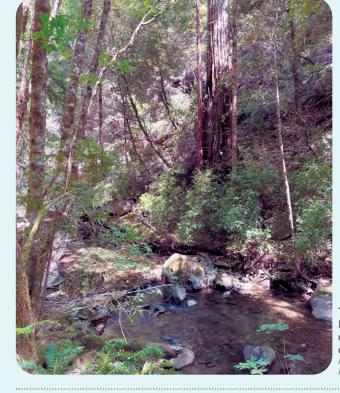
The process to make needed changes for Jackson Demonstration State Forest Real have been a particular point of difficulty. These issues have been brought forward in the last couple of years from several perspectives in FRN and elsewhere. Both North Coast state legislators have called for an expedited new management plan with no new plans approved until the expedited plan is in place. CAL FIRE/ Board of Forestry are clinging to a "New Vision" white paper to facilitate THP-by-THP approval rather than dealing with the whole Forest situation. They openly are



Maybe the best way to get some of these problems across is to share some quotes from the August 2023 letter of resignation as facilitator by Kim Rodrigues, who has had a long and distinguished career with UC Extension both as a scientist and skilled facilitator. As her letter shows, the situation of Jackson State Forest currently represents a failure to collaborate.

"I accepted the role as Facilitator for the JAG in November 2022 in order to establish a collaborative process to work through the past and ongoing conflicts related to management issues at JDSF. At that time and at my first JAG meeting in March, I stated I would remain facilitator if I was working well for Cal Fire, the JAG, and the public, and that the process had to be working well for me to remain in this role. I am unable to support a collaborative process due to the policy constraints imposed by the California Natural Resources Agency and the State Board of Forestry, combined with the timelines requested by Cal Fire to review and implement new THPs."

She goes on to say: "I was informed that the main purpose



The recovering, beautiful North Fork Usal Creek, with one of the many remnant old-growth redwoods. ALL PHOTOS THIS ARTICLE BY ALICA BALES, UNLESS NOTED



Bringing fire back to the Usal Redwood Forest at the Learn Burn. Interest, planning, and participation involved dozens of people and organizations

of the JAG and JDSF is to "keep THPs moving and achieve the non-THP goals." The JAG will need to make decisions on the Camp 1 THP in September. As the first THP coming to the JAG since I joined this process, it is critical to establish a clear process for decision making in order to support or deny this request. "

And finally she concludes:

"The JAG works on consensus, the highest form of collaboration, yet the process is not truly collaborative. Cal Fire announces the projects and timelines, seeks limited input with limited dialogue and makes decisions. I am willing to support a collaborative process if/when the State and CAL FIRE commit to such a process. And I sincerely hope the development of the new forest management plan is done in a collaborative manner."

Traditional Ecological Knowledge

This fall, the start of a cultural burn happened in Southern Humboldt Community Park. It was the precursor of a broader burn in 2024. Local Wailakis, Native Health in Native Hands, and others are involved. A beautiful recording of the event can be heard here. *https://share.transistor:fm/s/a801f669* This was one example of the growing presence and practice of TEK, Traditional Ecological Knowledge. You can search via the internet and find a lot of basic and inspiring information. This year's Redwood Forest Foundation, Inc. (RFFI) virtual annual meeting featured Karuk skilled cultural fire practitioner Kathy Mccovey. www.rffi. org/2023-annual-meeting-recap/

Full disclosure: I am on the Board of RFFI with an abiding interest in forest and watershed recovery. As I write, a prescribed burn is underway on the ridge between Piercy and Standley Creeks in RFFI's Usal Redwood Forest. Looks like good timing, hopefully dry enough before a week-long period of rain is expected.

A lot more prescribed and cultural fire is being planned for Usal Redwood Forest. Ideally it will be primarily cultural fire with Chinquapin Springs Tan Oak Grove and Duggan's Opening being pilot examples. Recovery of productive prairies from drastic incursion by conifers is a goal in our whole region.

Wailaki Opposition to the Great Redwood Trail in the Mainstem Eel River Canyon

Another issue of immediate importance which could remain so for decades—is the so-called Great Redwood Trail (GRT) that would extend from San Francisco to Humboldt Bay along the old railroad rightof-way, a.k.a. "rails to trails." Some parts near urban-suburban areas are taking shape. The rail-trail along Humboldt Bay is a northerly example. Through the Eel River Canyon is another matter. The Eel River White Lily Clan of the Wailaki have a written Resolution to Oppose the GRT which states in part:

"The Great Redwood Trail poses a great threat to the Eel River Canyon Preserve, The Grand Canyon of the Eel River which has been designated as a National Wild and Scenic River, and an incalculable number of Native American, Sacred and Sensitive Sites; both documented and undocumented. Many of these sacred sites have already been desecrated by the general public, including irreplaceable ancient petroglyphs which are thousands of years old, which have documented impairment and degradation from recent and ongoing human vandalism."

Of utmost importance to recognize and give thanks for is the removal of four dams from the Klamath River this year and in 2024, and related recovery efforts (see *klamathrenewal.org.*) There is perhaps no greater example of cooperation, collaboration, and communication over decades led by the Tribes in the Klamath Basin—an overdue response to gold, timber, fish, and green rushes as described by Kaitlin Reed in her new book *Settler Cannabis*.



The Copco Dam No. 2 during deconstruction. To see more photos of the before, during, and after removal: https://tinyurl.com/CopcoDam2Photos Photo By Shane Anderson of Swiftwater Films

Richard's Recommended Reading

Please try to read as many of these as possible —a real help in getting on the same page.

The following books and links give more insights and perspectives worthy of your time. I strongly recommend reading *Settler Cannabis* by Kaitlin Reed, especially her 24-page introduction.

The Man Who Went Away by Harold Bell Wright, published in January 1, 1942, a novel set in the broader area and drama of Andersonia prior to WW II, with changed place names for locales from the South Fork Eel River to Bear Harbor.

The River Stops Here: Saving Round Valley, A Pivotal Chapter in California's Water Wars by Ted Simon.

Stand for the Land: A Defining Duty of Richard A. Wilson by Tom Harris.

Link for recent Jerry Rohde (I am told these books can be downloaded for free from Cal Poly Humboldt): *https://www.amazon.com/Southern-Humboldt-Indians-Jerry-Rohde/dp/1947112791*

The Last Stand: The War Between Wall Street and Main Street over California's Ancient Redwoods by David Harris.

The Ghost Forest: Racists, Radicals, and Real Estate in the California Redwoods, June 6, 2023, By Greg King

And, this article: *https://www.yournec.org/expanding-redwood-nationalpark-in-1978-a-critical-act-to-save-the-park-from-virtual-obliteration/*

Remembering Richard Wilson

Former California Department of Forestry Director Richard Alexander Wilson passed this year. Here's a tribute I wrote. His life and perspective had incredible impact with immediate and future relevance.

Richard Wilson passed away in late summer 2023, shortly before his 90th birthday. The incredible scope of his life the struggles and conflicts, losses and achievements, with his leadership, and the adversity he faced—is monumental. His interest and support extended into the visioning and reality of the Redwood Forest Foundation, Inc. and Usal Redwood Forest.

Richard was connected with California throughout his life, from the Southern California Coast to the forested mountains of the North, and places in between and beyond. There are incredible details and stories. There are hundreds of pages of transcribed interviews as well as recordings available through the Bancroft Library of UC Berkeley alone.

Richard was an integral part of the intense struggles over forestry in Mendocino County in the 1980s—and both before and after. Those struggles are a major part of the events that instigated, enabled, and inspired the founding of the Redwood Forest Foundation, Inc.

Richard was the head of the Forest Advisory Committee (FAC) formed by the Mendocino Board of Supervisors following a resolution to "guarantee that the county's main resource (timber) will be managed so that its benefits will continue undiminished." Turns out Richard, amazingly, was appointed to be the Director of Forestry, a position he held for 8 years during the terms of Governor Pete Wilson in the 1990s. Richard intensely suffered when the Board of Forestry denied Mendocino County its Rules. This was an action that went against the regulations that pertained to, and permitted, county-specific rules.

Richard's time as the Director of the Department of Forestry was fraught with contention and compromises as he fought for conservation practices—between the daunting gauntlet of hardcore industry and earnest activists. He pressed for the report: *A Scientific Basis For The Prediction Of Cumulative Watershed Effects* by The University of California Committee on Cumulative Watershed Effects, published in June 2001. This is still a thorn in the side of CAL FIRE, which has never denied approval of a plan because of cumulative impacts. He brought an old friend, civil engineer Donald Gray, from University of Michigan, to examine the impacts of the New Year's storms of 1996-97, particularly the torrent that swept through Stafford. The conclusion: "deranged hillslope hydrology" from the clearcut source. Richard later chose to go to court against Pacific Lumber/Maxxam for fraud in a "cooked books" invalid Sustained Yield Plan in 2006.

In the latter part of *Stand for the Land* (see Reading List for this and more), the efforts of Henry Gundling and RFFI are highlighted. Giles Mead helped RFFI get started and helped publish *Stand for the Land*. We were always happy to see Richard, often with Randy Vann, at RFFI's annual meetings.

From the Epilogue of *Stand for the Land*, penned by Richard himself: "We must adopt a real conservation ethic and strategy to dismantle the disconnect between the ecosystem, as a natural order, and the overriding greeddriven human economic system, so that both our policy and practice



Erosion Field School examining recountoring a stream that had been completely buried during tractor logging.

To Get Involved

 Richard Gienger rgrocks@humboldt.net 707/223-6474

• EPIC wildcalifornia.org

• Institute for Sustainable Forestry *instituteforsustainableforestry.c om*

• Forests Forever www.forestsforever.org

• Mendocino Trails Stewards mendocinotrailstewards.org

 Redwood Forest Foundation, Inc. www.rffi.org

• Sanctuary Forest sanctuaryforest.org

• Save California Salmon www.californiasalmon.org

> Save Jackson Coalition savejackson.org

is to engage our people to go back to working the land so that it produces on a sustainable basis, for both us and the wild animals, and our offspring—and theirs. . . . Redefining and reasserting a more enlightened public purpose and mission will not be quick or easy. But it must not be further postponed."

Richard Wilson saw Redwood Forest Foundation, Inc. (RFFI) as a key part of that imperative.

Please help out where and when you can on all the issues before us. Check out the work of and other information for Sanctuary Forest, the Institute for Sustainable Forestry, EPIC, Forests Forever, Redwood Forest Foundation, Inc., and Save California Salmon.

Since arriving in the Mattole Valley of Humboldt County in 1971, Richard Gienger has immersed himself in homesteading, forest activism, and watershed restoration. Richard's column covers a range of issues including fisheries, watershed restoration, and forestry, plus describes opportunities for the public to make positive contributions in the administrative and legislative arenas as well as in their own backyards.

Growing Trees Foundation Building Capacity for Collaboration and Environmental Resilience

This year has been one of tremendous change and growth for the Trees Foundation. We bid farewell to our longserving and well-loved Board President Susy Barsotti, and we welcomed a new Board member, John Wilhelm. We also said goodbye to our newest staff member Mary Gaterud, who left the Organizational Development Director role in August. The Trees Board then formed an Executive Committee that evaluated ways to improve our organizational structure and decisionmaking process flow. This Executive Committee guided Trees Foundation collaboratively through many significant decisions, including the appointment of a new Board President. Leib Ostrow, and our first Executive Director, Damien Roomets.

For three decades, Trees Foundation has operated under a collective model where staff decisions were made cooperatively, with guidance from the Board of Directors. However, as we grew in size and in the number of projects we are managing, more clarity was needed in our communication and decisionmaking process. As Executive Director, Damien now serves as a crucial link between the vision and direction of the Board and the knowledge, expertise, and capacity of the staff. We are grateful for Damien's gift at communicating clearly and gracefully with all parties to promote greater understanding and appreciation throughout our organization. Damien's wealth of expertise in fire-adapted communities mean that he will also continue to play a vital role in our fast-growing Forest Health and Fire Resources Program.

These changes at Trees Foundation have strengthened our capacity to adapt to the needs of the North Coast environmental community that we serve. We continue to offer many free or reduced-cost services to our over 40+ grassroots partner groups in our network, while also growing our young Forest Health and Fire Resources program to offer services that support individual landowners in pursuing their land stewardship and fire-resilience goals.

INTRODUCING OUR NEW BOARD TREASURER

We are pleased to introduce our newest board member, John Wilhem. John's dedication to promoting community resilience, and his unwavering commitment to the environment made him a natural fit for the Trees Foundation. He is a volunteer firefighter and on the board of the Palo Verde Volunteer Fire Department as well as being a member of the Prescribed Burn Association and the Palo Verde Fire Safe Council. John's life's work embodies Trees Foundation's core values, as he continues to leave a lasting



Newest Board member, and Treasurer, John Wilhem, has been homesteading on a 420acre ranch in New Harris with his brothers since the early '90s.

impact on the lands and communities of the North Coast.

INTRODUCING New Staff Members

As our new Director of Organizational Development, **Sarah Brooks** will support our partners and the public in connecting them with the many services we offer, including Fiscal Sponsorship, GIS Mapping, Graphic Design, Facilitation, and more. Sarah is already writing grants for Trees Foundation, and has been instrumental in producing this issue of *Forest & River News* in close collaboration with Design Director Jeri Fergus and Board President Leib Ostrow—and for that we are deeply grateful.

Sarah is well known in the Southern Humboldt community thanks to her passion for grassroots organizing and her service on several boards including the Garberville Town Square and Beginnings



Sarah Brooks, our new Organizational Development Director, is active in many community organizations in southern Humboldt.

in Briceland. Sarah is the vice chair of Humboldt Progressive Democrats and co-founder of the Redway Fire Safe group. Sarah is the author of a children's book about river otters, has had numerous poems published in various journals, and has written several grants to support southern Humboldt community projects.

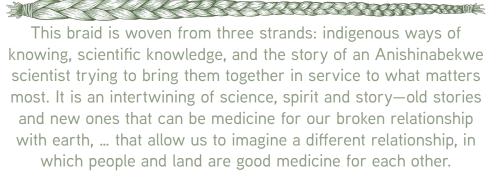
She was drawn to southern Humboldt in the early '90s because she wanted to raise her children in close connection with the earth. "I wanted to live in a community that values our interconnectedness with our forests, watersheds, and all species, " Sarah wrote. "That is what I love about this place and I feel that Trees Foundation exemplifies those values in our community."

Chelsea Sproul also recently joined the team, and she is stewarding the administrative aspects of our Forest & Fire Resources program while also helping with the coordination of Chipper Days and outreach for the Mail Ridge project.

"I was intrigued when I heard what Trees Foundation does to empower community-based land stewardship, and I feel honored to help support that mission as a staff member," wrote Chelsea.

Chelsea grew up in rural Pennsylvania, where time spent hiking, camping, and gardening shaped a deep connection with the natural world. She had nearly 10 years of fundraising experience for universities and non-profits in Philadelphia when she first visited Humboldt County in 2018, and was soon drawn to relocate to Briceland. "I was drawn to this area by the rugged natural beauty and incredibly welcoming and supportive community," Chelsea reflected.

"My eyes were opened when the August Complex blew up during the 2020 fire season and southern Humboldt had a close brush with the massive fires," Chelsea wrote. "I was inspired to join my



Robin Wall Kimmerer

local volunteer fire department so that I would be able to lend a hand when future fires threatened our region. Becoming a volunteer firefighter for Briceland VFD set me on a new path in life and sparked new love for our landscape and the use of prescribed fire to help maintain healthy forests and ecosystems."

Working for Trees satisfies my desire to bolster the already strong local communities of the region and to be a better steward of the land and natural resources for a more fire-safe and ecologically sound future. I'm working on making this my home and want to



Chelsea Sproul, our new Forest Health and Fire Resources Program Assistant, at the 2021 S-130 Field Day which brings together volunteer departments from across the region for firefighters to refresh their training on wildland fire basics.

ensure, in every way I can, that our region succeeds, and we can only do that by working together. "

Forest Health and Fire Resources Program

Fostering Resilience Through Collaboration

Trees Foundation's Forest Health and Fire Resources program is actively engaged in multiple projects aimed at enhancing environmental resilience and fostering community collaboration thanks to funding from Humboldt County Resource Conservation District, the State Coastal Conservancy, Humboldt County Natural Resources Planning, and the North Coast Resource Partnership.

MAIL RIDGE PROJECT

Creating a Fire-Resilient Landscape

We are proud to be part of a collaborative team working on a CAL FIRE Forest Health application for the Mail Ridge project. The Mail Ridge project encompasses a proposed 54-mile shaded fuel break, stretching from Founders Grove near Weott to Highway 101 near Leggett. This project aims to protect communities from wildfires by creating a defensible buffer where fire crews can engage with wildfire threats. It also promotes the use of prescribed and cultural fire, benefitting forest health and Indigenous revitalization.

CHIPPER DAYS AND DEFENSIBLE SPACE

A Community Endeavor

Our participation in the Humboldt County Community Wildfire Protection Plan Phase V Implementation Program, led by the County of Humboldt, focuses on community engagement. The Chipper Days project has been a success, with 24 completed chipper days and approaching 5,000 cubic yards chipped. This free program serves to reduce fuel loads, encourage the maintenance of defensible space and increase the fire resilience of our communities. Additionally, the Defensible Space project provides free fuels reduction work around homes for elderly, low-income and disabled residents. Trees Foundation has been focused on outreach to the community, the development of candidates for assistance and providing home risk assessments to project participants.

SOUTHERN HUMBOLDT COMMUNITY PARK PROJECT A Vision of Resilience

In collaboration with partners like Native Health in Native Hands, Eel River Wailaki, and Institute for Sustainable Forestry, we're providing technical assistance for the Southern Humboldt Community Park Project. This initiative seeks to embrace



A Pair of Purple Martins (*Progne subis arboricola*) utilizing a snag on the Northern Red Mountain Forest Health Improvement Project. Purple Martins are a listed species of concern that over winter in Southeastern Brazil. They were one of several species protected with exclusion buffers during the Red Mountain project. PHOTO BY KYLE KEEGAN

fire-resilient land stewardship practices, including cultural fire and native nursery projects, all while educating the community on native plants and their traditional uses.

AVIAN NEST SURVEYS ON RED MOUNTAIN

Protecting Wildlife and Sharing Ecological Knowledge

Kyle Keegan, our dedicated Ecological Restorationist, recently completed avian nest surveys on the Northern Red Mountain Forest Health Improvement Project in northern Mendocino County.

Kyle focused on locating and protecting breeding birds within areas undergoing forest restoration and fuels treatments. This effort protected a total of 18 nests across 14 different species. Kyle also documented essential ecological observations and provided technical assistance to project crews.

OUR COMMITMENT

These initiatives underline Trees Foundation's commitment to collaboration, building community resilience, and promoting responsible land stewardship. We look forward to continuing our journey of environmental stewardship, interconnectedness, and resilience across California's North Coast.

For more information or to get involved, please reach out to Damien Roomets at *director@treesfoundation.org*





Chipper Days clearing in Shelter Cove Photo by Jonathan Lehman

Flowers for Susy

Susy Barsotti, a long-time member of the Hog Farm at Black Oak Ranch in Mendocino, and tireless environmental advocate, recently stepped down from the Trees Foundation Board of Directors after a quarter-century of dedicated service. She served Trees with aplomb, commitment, and boundless energy. Longtime Trees staffer Barbara Ristow recalls Susy "always promoting Trees" showing up at unaffiliated events with a wicker basket over her arm full of Forest and River News. Susy helped to set up Trees Foundation's Donor Advised Fund that continues to this day, and always generously provided space at the music events held at the Hog Farm. Trees received many generous and sustaining donations because of her outreach efforts. Barbara emphatically added, "Trees is truly losing an icon."

Board member Lenya Quinn-Davidson had the following to share: "It must have been about 15 years ago when Susy asked me and my husband Eamon to join the Board of the Trees Foundation. Susy is our Hog Farm family, like an aunt to me and more like a second mom to



Eamon, so it was fun to explore a more professional context under her leadership. Susy brought us into Trees to bring some fresh ideas, and I admired her for that. She could see that Trees, with its roots in early environmental activism, could benefit from some next-generation perspectives, even if they were sometimes a little different or uncomfortable. That openmindedness was a defining feature of Susy's leadership at Trees: she was always ready to hear different perspectives, elevate other people's talents and ideas, and explore new ways of thinking about and approaching issues. I've always

 Teses Board members in 2005, left to right, Bill EastWood, Karen

 Weiter Bill Destrow, Rose Madrone, and Susy!

thought of Susy as Queen Susy; she has a commanding presence that many leaders could only aspire to, and a glowing grandeur that comes so naturally, so regally. I already miss her leadership and insight at Trees, but I'm luckier than the rest of you because, for me, she's still family!"

Trees Foundation's new board president, Leib Ostrow, voiced the sadness felt by Susy's departure, "She has been with us for so long, it is hard to remember times without her. She was always extremely generous with her time and energy and able to use her friendships and business connections to encourage others to support Trees' mission. Possessing everything one could ask for in a leader, she brought the best out in people. Susy has always had a huge heart and an incredibly strong sense of conviction. Her awesome sense of humor has helped us through difficult times. "

Susy, We miss your devoted participation and remarkable laughter already, but wish you the very best!

With all our love and appreciation, *Trees Foundation Staff and Board*

Introducing Baduwa't Watershed Council

Formerly the Mad River Alliance

In Humboldt County, the Mad River is a lifeline, heavily utilized by its surrounding communities, both human and animal. The watershed connects wild spaces to neighborhoods. The river is the source of drinking water for approximately 90,000 community members. It is recognized as a climate refuge, provides habitat for a wide array of wildlife, and is critical to the health of the Humboldt ecosystem.

If you have heard of the Mad River, chances are you have also heard about the Mad River Alliance. Since 2012, we have organized river clean-ups, summer steelhead surveys, invasive plant removals, and a long-term temperature study. We are currently working with the City of Blue Lake to restore a vital tributary to the river, Powers Creek.

Honoring the Traditional Name of the River

For the Wiyot people, it has never been Mad. It has always been Baduwa't. For thousands of years, the Wiyot people lived in the Baduwa't Watershed and surrounding area with an abundance of natural wealth. Due to colonization, in less than 200 years, poor landmanagement practices have negatively impacted the Baduwa't ecosystem. By changing our name, we pay homage to the beautiful balance that existed between the watershed and the Wiyot people before colonization.

This name change, approved May 2, 2023, by our Board of Directors, reflects and honors the history of the watershed and its original stewards. Baduwa't, in the Wiyot language, means free-



A successful Invasive Species Removal event in Powers Creek. Photo by Isabelle LeMieux

flowing stream. We filed the official paperwork with the Secretary of State and are starting a new chapter as the Baduwa't Watershed Council (BWC).

A Community-driven Group

The Baduwa't Watershed Council is a community-driven group working to protect clean local water and the ecological integrity of the Baduwa't (Mad) River watershed for the benefit of its human and natural communities. We are a registered 501(c)3 organization in Humboldt County, California.

We approach our mission by implementing several different tactics. Restoration is done through funding projects that repair damage in our local watershed ecosystem. Education and outreach provide the community with accessible information about the state of the watershed through events and volunteer opportunities. The monitoring research we sponsor is important and documents the health of the watershed.

The BWC works in cooperation with community, local land managers,

and county, state, tribal, and federal agencies to ensure the recovery of this vital river. Every year, BWC volunteers survey more than 50 miles of remote river areas to assess the population of endangered summer steelhead. We initiated the first documented surveys of the Mad River Estuary in over 40 years and implemented the first coordinated temperature study in the basin.

Removing Trash and Invasive Plants from the River

With the help of many volunteers, we have removed more than 1,000 cubic yards of trash from the river, including old cans of oil, refrigerators, computers, baby diapers, and 500+ tires. In addition to our volunteer efforts, we undertake grant-funded restoration work.

Our most recent grant-funded project is on Powers Creek, a tributary to the Baduwa't. The Powers Creek Project gained momentum this year. Funding is provided by a grant through the California Department of Water Resources. The Baduwa't Watershed Council (BWC) and the City of Blue Lake partner in the restoration project.

The BWC held two invasive species removal events in Powers Creek in September. Volunteers came from Cal Poly Humboldt, the California Conservation Corps, and the community. With everyone's cooperation, we removed a huge pile of invasives. We also succeeded in clearing areas that will be used by surveyors to begin new site plans to obtain the required permits for further invasive species removal.

The BWC also led a Youth Group in an invasive removal effort. This time, the focus was primarily on Himalayan blackberries. The youth were not afraid of the brambles and made a big impact. We look forward to doing more work on Powers Creek in the spring.

For more information: baduwatwatershedcouncil.org

Jackson State Forest Update:

CAL FIRE Poised to Restart Logging While Promises for Tribal Co-Management and Protection of Sacred Sites Go Unfulfilled

Bay Area Coalition for Headwaters

By Karen Pickett, Bay Area Coalition for Headwaters (BACH), Coalition to Save Jackson State Forest

The good news is that quiet and calm settled into the Jackson Demonstration State Forest (JDSF) during the last year and a half, absent roaring chainsaws and falling redwoods. The bad news is that the forest's managers at CAL FIRE continue to offer assurances of a "new vision" out one side of their mouths, while touting their out-of-date and



Activity in Jackson Forest in January of 2022 (Redtail plan) Photo by Chad Swimmer

misguided "business as usual" plans that fly in the face of promised collaboration and cooperation. The further bad news is they plan to skirt CEQA, California's foundational environmental protection law, while writing a new management plan.

On Sept. 15, the Jackson Forest Advisory Group (JAG) and CAL FIRE saw close to 100 people pack their meeting in Ft. Bragg, including strong representation by the Coalition to Save Jackson Forest (of which BACH is a participant). With Tribal voices in the forefront, hours of public testimony caused the JAG to scuttle their protocol.

And with good reason—that protocol is fundamentally (and deliberately) flawed. The recent resignation of a qualified facilitator hired by CAL FIRE made plain those flaws. Hired to shepherd the JAG through a collaborative and forwardlooking process as per CAL FIRE's socalled "new vision" announced in August of 2022, that facilitator found herself stymied at every turn in implementing a

truly inclusive and collaborative process. CAL FIRE was also forced to delay the approval of a new Timber Harvest Plan, which they were rushing through before relevant management plan changes can be reviewed or implemented.

CAL FIRE's—and the JAG's—agenda is to move into a planning process for a new (and badly needed) Management Plan for the Jackson Forest. A new plan, informed by an updated Environmental Impact Report, replacing the 16-yearold assessment, would allow for comanagement with area tribes and cultural and climate considerations (previously absent) high on the list. Jackson also needs a new mandate-it has had the same mandate for commercial logging from its founding 70 years ago, which ignores the high value of this forest type for carbon sequestration and storage, and fails to recognize the ancestral homelands and sacred sites that lie within the forest's borders, and indeed lie within THP borders. CAL FIRE claims to be on track to correct these failures in existing management, but so far is not delivering.

Jackson advocates saw a significant victory in August of this year, when the 10-million-strong statewide California Democratic Party passed a resolution supporting tribal co-management of the forest. This Resolution falls in line with Gov. Newsom's 2020 policy directive to implement, wherever possible, comanagement agreements on state-owned lands with the descendants of tribes who had been forcibly dispossessed of that land. Jackson is the ancestral home and refuge of the Northern Pomo and Coast Yuki Tribes, and it holds one of the largest archeological repositories of Indigenous cultural and sacred sites found on California public lands. This fact, and climate considerations, should

"The land is the real teacher. All we need as students is mindfulness." Robin Wall Kimmerer

stand out as primary considerations for management decisions.

The Coalition to Save Jackson Forest, comprised of local residents, forest experts, environmental groups, and tribal members, is stepping up its game, bracing for CAL FIRE's intention to start up logging plans. The Coalition continues to support co-equal, comanagement agreements arrived at via government-to-government negotiations with tribes. We invite you to join us.

The theme of this *Forest & River News* is cooperation, collaboration, and communication, which is truly how our Coalition to Save Jackson Forest works. If only the agencies that oversee these precious ecological and cultural resources could use that model.

See SaveJacksonForest.org to sign up for updates and learn more to help preserve the integrity of Jackson Forest.

Collaborating to Teach Children about Salmon

Friends of the Van Duzen River

By Sal Steinberg, Director, Friends of the Van Duzen River

I live in one of the most beautiful places on Planet Earth: the Van Duzen Watershed. Within a 15-mile radius there are three K-8 elementary schools: Bridgeville, Cuddeback, and Hydesville. Following 8th grade, students move on to Fortuna High School, where they can participate in the Fortuna Creeks Project, a club begun by Pam Halstead and currently run by Mark Thom.

Looking Back on Past Cooperative Efforts

It has been my honor to run the Friends of the Van Duzen River for the past 15 years. We are dedicated to preserving the salmon run and to training young scientists. Details about our work can be found on our website, www.fovd.org One of our first projects was in 2011 at Cuddeback Elementary, where we selected five students known as the Young Scientists to explore the river, locating and documenting salmon discoveries. It was a great time for exploration. The early part of the "teens" decade was a milestone for salmon spawning in the Van Duzen, and FOVDR was able to take more than 500 students to witness this inspiring event. The photo portrays the times.

FOVDR has been fortunate to collaborate with local environmental granting agencies including Trees Foundation, the McLean Foundation, Coast Central Credit Union, Humboldt Area Foundation, Humboldt County Office of Education, and Six Rivers National Forest. We have received close to \$500,000 in grants to actualize our goals and enhance the community's sense of preserving our natural resources, allowing us to share the planet, and making sure that we have a future.

Our Current Project

Team Van Duzen: Salmon Watch is a cooperative venture partially funded by a Cereus grant from the Trees Foundation to promote environmental education and advocacy for preserving Mother Earth. Funding is being matched by the Cuddeback School District principal Blaine Sigler. Team Van Duzen connects local students with the Van Duzen Watershed through classroom lessons by local scientists/environmentalists and field trips to the Van Duzen River, the Scotia Aquarium, and the confluence of the Van Duzen and Eel rivers.

This grant is dedicated to the 6th-grade classroom at Cuddeback school taught by Erin Anderson, a wonderful teacher. As a local resident of Carlotta, I know many of the students in the current 6th grade and am looking forward to working with them to study/learn about salmon and watersheds, and to explore the beautiful Van Duzen Watershed with the goal of finding salmon spawning. It has been a difficult time for salmon for the past decade, but due to the increased rainfall this spring and even summer, many parts of the river are clean and clear. I predict a much better salmon run. If we (my team and the 6th-grade class) find salmon, then we can extend the grant to other classes, enabling them to take field trips to see this magnificent journey.

I have recruited a wonderful local team of scientists/environmentalists from the community to work with the kids in the classroom and in the field. Team Van Duzen is a very cooperative venture!

Team Van Duzen

Tony Westcamper: As a retired technician from the local hospitals, Tony has been attracted to the insect

population of Humboldt County. He has a scientific mind and for several years wrote articles in the *North Coast Journa*l about his passion for insects and knowledge about them. He has worked with me for the past decade giving exciting presentations to classrooms and taking students out into the Van Duzen.

Steve Cannata: Retired from the California Dept of Fish and Wildlife, where he worked as a fisheries biologist and environmental scientist, Steve has been a teacher with me in classrooms, summer camps, and field trips. He loves to teach and gives great lectures on fish and watershed ecology while sharing his knowledge and skills with students during field studies.

Barbara A. Domanchuk: In 2000 this independent filmmaker living in Carlotta formed an Ink People DreamMaker program called Art & Science for Kids interested in Media & Education (ASK

ME). Within ASK ME she coordinates science-based art programs for youth and families. The programs are the Ecology & Art Education Program, the Young MediaMakers, Big Screen Showcase, and TYMM Work Project. Recently, Barbara became an artist for the Humboldt County Office of Education's Studio To Schools program, where she teaches classroom and field trip programs designed to inspire and engage young minds with the world around them.

Team Van Duzen will work at Cuddeback Elementary and in the Van Duzen River during October, November, and December. Beginning October 17th I will give a workshop every Tuesday morning, and one of our team members will give a workshop each Thursday. Barbara will do salmon prints with the class through the Humboldt County Studio to Schools program. In mid-late November we shall begin our community Salmon Watch in an attempt to find them and then to share



Erin Anderson, 6th grade teacher, with salmon drawing students. Photo by Sal Steinberg

this unique experience with students in the 6th grade and possibly other classes.

Good luck on your journey, my friends the Salmon.

For more information: fovd.org

Introducing Humboldt Waterkeeper!

New Name, Same Fantastic Bay Tours Humboldt Waterkeeper

We have a new name! Humboldt Waterkeeper, formerly known as Humboldt Baykeeper, was founded in 2004 after the resounding defeat of a proposal for a Liquified Natural Gas (LNG) import facility on the Samoa Peninsula.

2023 Humboldt Bay Tours Program

From April to October, Humboldt Waterkeeper offers tours of Humboldt Bay and nearby coastal areas with a wide range of partner organizations, including Centro del Pueblo, a migrant and Latinx rights organization; English Express, the non-profit English-as-aSecond-Language (ESL) school; the Indian Natural Resources, Science and Engineering Program (INRESP) department at Cal Poly Humboldt; The Studio & Canvas + Clay, an art program for adults with varying abilities; and the County Library summer reading program, the Humboldt County Transition-Aged Youth Collaboration, and Community Access Program for Eureka (CAPE).

CAPE is a fantastic program that provides access to a wide range of quality-of-life activities for all, regardless of their living situation or income. This past summer, we partnered with CAPE to provide the Humboldt Waterkeeper Summer Series for families served by the Betty Chinn Homeless Foundation, Eureka Rescue Mission, and Serenity Inn. Activities included Madaket cruises of Humboldt Bay, tours of the Humboldt Botanical Garden, and nature walks involving bird-watching and watercolor painting. To learn more about CAPE or make a contribution, visit *www.eurekaheroes.org.*

This year's tours were funded by the California Coastal Commission's WHALE TAIL® Grants Program, the



On July 8, English Express students and their families joined us for a kayak tour of Humboldt Bay led by the wonderful guides at the Humboldt Bay Aquatic Center. PHOTO COURTESY OF MARCUS MOORE

State Coastal Conservancy's Explore the Coast grant program, and Humboldt Area Foundation. If you know of a community organization interested in Humboldt Bay tours, please contact Jasmin Segura, Bay Tours Coordinator, at *jasmin@humboldtwaterkeeper.org.*

For more info about our work, visit us at *www.humboldtwaterkeeper.org.* You can sign up for alerts and Bayrelated news by sending an email to *alerts@humboldtwaterkeeper.org.*

A Busy Releaf Petaluma Season Ahead as More Shade Trees Are Planned for the Area

Releaf Petaluma

ReLeaf Petaluma has an exciting and ambitious planting season ahead. We kicked off our season on October 21 with a Pod Leader training event. A pod is ReLeaf's term for a group of 8-10 volunteers that work together to complete an assigned area. We planted eight beautiful redwood trees at Grant Park while simultaneously training our Pod Leaders on best practices for tree planting, group leadership skills, and more. It was a wonderful day to head into our season.

ReLeaf is the grateful recipient of a new grant award of \$62,000 from CAL FIRE and California ReLeaf, thanks to California Climate Investments, to add 103 native shade trees to 5 parks, and 95 large and small trees to 4 secondary schools, all of which greatly need the canopy cover. Anna's Meadow, La Tercera, Turnbridge, and Fox Hollow parks will gain a total of 87 trees. On the Westside, the windprotected and fog-prone Grant Park gains eight coast redwoods (planted in October), adding to six others already on the site to



ReLeaf Petaluma volunteer Stacey Lisker hard at work preparing a redwood tree for planting at a local park. PHOTO BY MARCUS MOORE

create a beautiful redwood grove. ReLeaf will be participating in the Urban Forest Management Grant from CAL FIRE, also thanks to California Climate Investments, planting 77 young shade trees at Wiseman, Miwok, and Arroyo parks.

ReLeaf grant writers and the City of Petaluma were honored to win a one million dollar grant funded by President Biden's Inflation Reduction Act and distributed by the U.S. Department of Agriculture's Forest Service! Funds will be used to plant about 2,500 trees in Petaluma over 4 years. These native trees, which will be planted in parks, schools, residential areas, and riparian corridors, will be a long-term benefit to Petaluma residents. The tree canopy will buffer our town from increasing temperatures, our water and air will be cleaner, and we've given biodiversity a home. In addition, the money will fund a native oak restoration program of over 1,000 local native oak trees grown from acorns with the help

of ReLeaf Petaluma's Teen Tree Corps. Our other partners on this program include Point Blue Conservation Science, Daily Acts, Rebuilding Together, Cool Petaluma, San Francisco Estuary Institute, and the United Church of Christ. For more details, read the City of Petaluma's press release: https://cityofpetaluma.org/ petaluma-urban-canopy-project-grant/

For more information: www.releafpetaluma.org

The Annual Salmonid Restoration Conference, March 2024

Holding Space: Creating Habitat and a Platform for Innovation Salmonid Restoration Federation

Salmonid Restoration Federation (SRF) produces the largest salmon restoration conference in California, convening a diverse range of people in the watershed restoration field including planners, engineers, policy makers, students, Watershed Stewards Program members, consultants, academics, tribal members, on-the-ground practitioners, and landowners. It is this wide range of practitioners and the intersectionality of science and application that animates our conference and creates a dynamic venue for learning from one another's experience and expertise.

SRF will host the 41st Annual Salmonid Restoration Conference in Santa Rosa, CA, on March 26-29, 2024. To ensure that we do not sell out early like we did last year, we are hosting the conference at the Sonoma Fairgrounds for the workshops and tours, and at the Hyatt Regency in downtown Santa Rosa for the main conference days. This is a state-of-the art facility that will have room for all our multifaceted events including the Plenary session, a mentor-mentee program, a lively poster session, exhibitor space, and a banquet dinner and awards ceremony.

The conference will include technical and practical workshops on forwardthinking restoration topics including:

- Community Outreach, Collaboration Tools, and Tribal Engagement Workshop
- Nature-like Fishways: Modern
 Perspectives and Techniques
- The Role of Conservation
 Hatcheries in Salmon Recovery
- Fish and Fire Conversation: Where Do We Go From Here?

Field tours include restoration projects in Lagunitas Creek, Napa River Restoration, the Garcia River Estuary Habitat Enhancement, Dry Creek, Process-Based Restoration in the Uplands of Western Sonoma, Urban Creek restoration, and the Laguna de Santa Rosa.



The Garcia River tour, at the SRF Conference, will visit habitat enhancement sites in the Garcia River estuary. Photo courtesy The Nature Conservancy

Concurrent sessions will highlight groundwater recharge planning, effectiveness monitoring, streamlined permitting pathways, Klamath postdam removal restoration actions, fish passage, low-tech Process-Based Restoration and so much more.

Please visit the SRF website to see full descriptions of the workshops, field tours, and concurrent sessions. Conference registration will open soon. SRF also has a scholarship fund to ensure that the conference is accessible to students, tribal members, and landowners, who may not otherwise be able to attend. SRF will match each dollar contributed. Here is the link to our scholarship fund. *https://calsalmon.nationbuilder. com/srf_conf_scholarship_fund*

To learn more about the conference, please visit www.calsalmon.org/ conferences/41st-annual-salmonidrestoration-conference

Collaboration in McKee Creek

Sanctuary Forest

By Ash Brookens, Sanctuary Forest

Tucked between the winding county road and a densely forested hillslope as you approach the community of Whitethorn is McKee Creek, a headwaters tributary to the Mattole River. From the road, you might not even notice that it's there. But this stream holds promise for coho recovery in the Mattole.

At one time McKee Creek, highly impacted by logging, was in an extremely degraded state. Today, recovering reaches* within McKee are characterized by cool, clear water and improved salmonid habitat. McKee Creek is the site of several streamflow and habitat enhancement

* A reach is any length of a stream or river..

projects undertaken by Sanctuary Forest (SFI) and our partners in recent years that have contributed to improved conditions for aquatic species. Though SFI coordinates and monitors these efforts and secures funding, these projects are the result of ongoing collaboration among our planning and implementation partners, funders, restorationist colleagues, permitting agency staff, and volunteers in our community. A branch-packing project completed in an entrenched side tributary of McKee Creek this fall vibrantly illustrates this collaborative spirit.

The branch-packing work (explained in the next paragraph) is part of a larger habitat restoration project that was started in McKee Creek in 2019. The project was funded by the Wildlife Conservation Board (WCB) and the Schwemm Family Foundation¹ and developed by Sanctuary Forest, Stillwater Sciences, the Mattole Salmon Group, and Elijah Portugal, a fluvial geomorphologist and Senior Environmental Scientist with the California Department of Fish & Wildlife (CDFW). The original design approach in the mainstem of McKee Creek evolved through a collaborative learning process among these partners. Outcomes from previous projects influenced the replacement of beaver dam analogues (BDAs) with the installation of log and boulder weirs, plus heavy wood-loading to create large complex wood jams throughout 1,000 feet of the stream. This last phase, completed in late October as the rains gently settled in, consisted of installing 10 check-dams at strategic

¹ The Schwemm Family Foundation supports healthy and sustainable communities by promoting programs and initiatives that strengthen communities through the enhancement of natural environments, *www.schwemmfamilyfoundation.org*

points along 275 feet of an intermittently flowing side tributary. The original plan for the tributary also utilized post-andweave structures, similar to the BDAs Sanctuary Forest built in Lost River (another headwaters tributary) several years ago. Because BDAs proved very cost—and labor-intensive, and require a fair amount of ongoing maintenance, we revised our plan to instead utilize brush and woody debris sourced from adjacent slopes to "branch-pack" the channel.

What Is Branch-Packing?

The primary objective of installing these structures, and of branch-packing more generally, is to reduce erosion and reverse channel incision, which is severe at this location. By trapping sediment, thereby raising the channel bed, the groundwater storage capacity of the aggraded bed is increased. As a result, more water is held in the stream banks and toe of the hillslope. The brush-dams (vertically rather than horizontally packed permeable dams) mimic natural accumulations of large wood in the stream and serve as grade control structures. Streamflow enhancement benefits of this project will be localized due to its size, but having even a small inflow of cool groundwater to McKee Creek from the tributary during the summer is critical for juvenile salmonid rearing. McKee Creek currently supports steelhead spawning every year, and rearing in normal rainfall years, with coho also documented spawning and rearing in the creek within the past decade. However, in drought years, summer streamflows become insufficient to sustain rearing, and hundreds of juvenile steelhead perish when isolated pools begin drying up.

To guide our branch-packing efforts in the tributary, SFI staff consulted local and



Two CCC members assist as community volunteer, Georje Holper (left), demonstrates for the crew how to branch-pack an incised tributary to McKee Creek. PHOTO BY ASH BROOKENS

regional restoration practitioners Georje Holper and Brock Dolman, each offering decades of experience mitigating erosion and remediating its impacts in salmonbearing streams of Northern California. Over the course of several weeks, Georje volunteered to instruct SFI staff, community volunteers, and members of the California Conservation Corps (CCC) on effectively using site-sourced materials such as huckleberry and decaying Douglas-fir logs to construct the dams and branch-pack the deeply incised gully. The CDFW Habitat Restoration Manual was also consulted, but stream conditions don't always conform to diagrammatic examples. It's hard to beat having a seasoned local practitioner working alongside you to assess and illuminate the nuanced challenges of each unique site.

As we walk the trail to where the CCC crew is piling the huckleberry they're harvesting for constructing the brush dams, Georje tells me how she feels it's important for these types of restoration techniques to be passed on to younger people who may not otherwise encounter them. "I'm glad to see this sort of low tech, low impact, low cost, bioengineering restoration project being done locally," she says. "It delighted me to introduce and pass on the useful art of building brush dams and branch packing to the younger generation." And, she points out, "I do not consider it work, it's way fun!" Even after days of soggy, cold conditions, I wholly concur.

Pass On the Knowledge and Collaborate on Action!

In an effort to make this fun and valuable learning experience reach even further, SFI's Administrative, Education and Development Director Anna Rogers is creating a video from Georje's technical demonstrations to share with

collaborators such as the CCC so that they can train their members and transfer this technique to other watersheds. "The CCC crew and Sanctuary Forest employees showed genuine interest in the techniques, they asked great questions, and with a little guidance, they built some great functional brush dams," says Georje of our efforts. CCC leadership also expressed their support of these instructional opportunities to learn practical and transferable restoration skills. As Georje points out, "There is an infinite need for this type work in our watersheds, and hopefully some of the younger (and older) generations will be inspired to learn and use these simple, yet highly effective, gully and stream restoration methods."

People come to watershed restoration by many different paths and arrive with varying specialties and experience levels. Opportunities for the kind of in-the-trench (literally) skill building that happens when we're learning and working side-by-side can really fortify our toolkits. Through these collaborations, we

grow our understanding of what it takes to improve ecosystems: we encounter new perspectives and learn about what's been working (or not). People discover the unique ways they can contribute. After all, land and water stewardship are everyone's business. Having the support of community volunteers, CCC members, and other collaborators in tackling the tedious hand-work required at sites like the McKee tributary with access barriers or difficult terrain, is what makes these important aspects of a larger project feasible. The larger projects can't happen without a network of local equipment operators, skilled laborers, engineers, scientists, administrators, and others with the experience and the will to implement them. And we need these watershed-scale remediation projects to happen, for the benefit of our whole community: the human members and all the others with whom we share our irreplaceable home, and with whom we have a responsibility to collaborate.

For more information: sanctuaryforest.org

We would like to express our heartfelt thanks and appreciation to

Bill Graham Memorial Foundation

for their generous ongoing support of Forest & River News **Cereus Fund** for all the years of support and whose endowment gave us the courage to proceed in this expansion!

"Without Love in the Dream, it Will Never Come True"

Thank You for Supporting Trees Foundation!

We rely on the generous support of our readers to fund our work. Trees Foundation provides services to a network of over forty grassroots partner groups that are leading community-based efforts in healthy land stewardship throughout California's Redwood Coast.

Your donation enables us to continue supporting our partner groups, publish the *Forest & River News* magazine, and help create a more fire safe and ecologically balanced future for Northern California communities. Trees Foundation collaborates on large-scale restoration and land stewardship projects across the region, yet remains a small organization that feels the direct impact of your gift.

> You can donate online at: *Treesfoundation.org/Give* or mail your tax-deductible gift to: Trees Foundation 439 Melville Rd. Garberville, CA 95542

We offer the option of physical or email subscriptions to Forest & River News. You can choose your preference on our website at treesfoundation.org/forest-river-news/subscribe/ or email us at trees@treesfoundation.org if you would like to update your preference.

Also, we encourage those of us who are growing more mature (older) to think about considering a "legacy giving" donation from your estate upon your passing. You can consult with your legal advisor or our financial director if you need help with this.



"If we are looking for models of self-sustaining communities, we need look no further than an old-growth forest."

We'd love to hear from you

It's hard to operate in a vacuum. We'd love to hear from our readers. What do you like (or even don't like) about our newest issue.

You can write us by snail mail. Or leave comments or letters at our website and we will reprint what we can.

Also, if you have a good story to tell connected with those trying to care for our environment or photo or drawing, please contact us and we will try to include in our next issue. (We encourage the work of younger ones!)

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Editors Kathy Glass Jeri Fergus Kerryanna Reynolds Mona Provisor Sarah Brooks Chelsea Sproul Damien Roomets

Design & Layout

Jeri Fergus Graphic Consultant Maude Turpin

Cover Image

A Culturally-informed "Learn Burn" in the Usal Forest brings good fire back to the landscape. Photo by Alicia Bales

The views, thoughts, and opinions expressed in this publication are those of the authors and do not necessarily reflect the position of Trees Foundation.

If you would like to distribute Forest & River News in your area, please contact us!

Trees Foundation is located at 439 Melville Road, Garberville, CA, 707/923-4377, www.treesfoundation.org

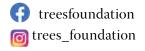
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MEROCY

Our mission is to restore the ecological integrity of California's North Coast by empowering and assisting community-based, regional projects that promote healthy land stewardship.

Words of Wisdom

Robin Wall Kimmerer is a mother, botanist, author, decorated professor, and member of the Citizen Potawatomi Nation. Within Braiding Sweetgrass she beautifully bridges the academic scientific world's approach to the world of plants and nature with wisdom garnered over thousands of years by the original inhabitants of this continent. Her publisher, Milkweed Editions, has generously donated a number of books for us to gift to our donors on this 10th anniversary of the book's release.

We would like to offer a free copy of Braiding Sweetgrass with every donation of \$100 or more to Trees Foundation.

We are excited to pass this wisdom on as a thank you for your generosity. If you already own a copy, we can send one to a friend as a gift.

"The trees act not as individuals, but somehow as a collective. Exactly how they do this, we don't yet know. But what we see is the power of unity. What happens to one happens to us all."

NATIONAL BESTSELLER thymn of love to the world. ELIZABETH GILBERT

BRAIDING

SWEETGRASS

Indigenous Wisdom, Scientific Knowledge,

and the Teachings of Plants

ROBIN WALL KIMMERER

From Robin Wall Kimmerer's Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants