

Mattole Watershed NEWS

SUMMER/FALL

2018



ISSUE # 11

Remembering Freeman and when Restoration was Radical

By Ali Freedlund, Mattole Restoration Council, with David Simpson, Mattole Salmon Group, Rondal Snodgrass, and Jerry Martien.



Above: Freeman House (left) and David Simpson fishing for broodstock for the salmon hatchbox program after the trapping weirs had been wiped out, fall 1980. Photograph courtesy of David Simpson.

Seldom do we meet those remarkable souls who so alter the foundations of our perspective that we dare refer to them as Teacher. Freeman House was certainly one of those souls. He was the Doyen of Mattole restoration thought and therefore action. He realigned, in an elegant, delectable way, the lens we use to view the place we live. And it stuck. And it was far-reaching.

Freeman emphasized the need to engage all peoples in their places to reweave what had become a tattered tapestry of the land. Through his writings, speech, and humble presence, Freeman carefully constructed a manner of living in relationship with forest, river, and meadow. He not only studied the earlier traditions of local tribal peoples, but he launched a new and familiar way of honoring and implementing the work that the

earth tells us needs to be done. He crafted homages to the ‘work’ as a model for generations. A longtime friend and restorationist, Bob Anderson, when asked what Freeman’s influence was, immediately replied, “Freeman’s gift was his ability to mainstream radical ideas.” Interesting that it was radical to muddle with spawning fish to increase their numbers or to negotiate the protection of an old-growth forest, or to out-slope rural ranch roads to decrease sediment, or to bring together disparate groups in a watershed alliance, or to cobble together conservation parcels in the middle of the watershed that would create a wildlife corridor from Humboldt Redwoods State Park to the King Range National Conservation Area. But in looking back, each one of these successes had been novel, and yes, radical for its time. Yes,

See “Freeman House” - continued on page 4

Mattole Restoration Council
P.O. Box 160
Petrolia, California 95558

Non-Profit Org
U.S. Postage
PAID
Eureka, CA
Permit No. 76

In this issue...

Page 3: From the Executive Directors: MRC, SFI, and MSG
Page 4: Freeman House and When Restoration was Radical
Page 5: A Chinook Comeback? Winter 2017-18 Salmon Spawner Update
Pages 6: Words from Freeman
Page 7: Tributary Collectives
Pages 8-9: Drought Resilience and Community Water Supplies
Pages 10-11: Groundbreaking Work in Baker Creek
Page 12: Step Up in Support of Local Youth
Page 13: Magic Tails: Fishing for Mattole Steelhead
Page 14: MRC offers Native Plants, Reveg Services, Chipper Days
Page 15: Hoop House Hoedown July 21st!
Page 16: Get to Know the King Range

Mattole Restoration Council

P.O. Box 160 • Petrolia, CA 95558
Phone: (707) 629-3514
Fax: (707) 629-3577
Email: mrc@mattole.org
Website: www.mattole.org



MATTOLE RESTORATION COUNCIL MISSION

The mission of the Mattole Restoration Council is the restoration of natural systems in the Mattole River watershed and their maintenance at sustainable levels of health and productivity, especially in regards to forests, fisheries, soil, and other plant and animal communities.

MATTOLE RESTORATION COUNCIL VISION

"We look forward to a Mattole that has healthy, self-sustaining, productive forests, meadows, and streams, with abundant native fish and wildlife populations. We envision a community that draws its sustenance from and lives in harmony with the environment. We seek to understand processes of natural healing and enhance them using best land practices in harmony with the local environment. We seek to enhance the exchange of knowledge among all community members toward that goal. We look forward to a time in the Mattole watershed when "restoration" will no longer be needed."

BOARD OF DIRECTORS

Kelton Chambers • Yarrow King
Christina Malatesta • Loren Miller
Michele Palazzo • Gary "Fish" Peterson
Claire Trower • Sarah Vroom
John Williams • Veronica Yates

STAFF

Nathan Queener • Executive Director
Pamela Conn • Contracts Manager,
Bookkeeper

Laura Cochran • Contracts Manager
Hugh McGee • Native Ecosystem
Restoration Program Director
Ali Freedlund • Working Lands and Human
Communities Program Director

Native Ecosystem Restoration:
Michael Camilleri • Hugh McGee
John Summers • Veronica Yates

Working Lands and Human Communities:
Ali Freedlund • John Summers

Watershed Science and Information:
Nathan Queener

Education and Outreach:
Flora Brain • C. Moss • Theresa Vallotton

Thank You to our Supporters:

Bella Vista Foundation
Bureau of Land Management
CalFire
California Department of Fish & Wildlife
California Dept. of Water Resources
California Fire Safe Council
Cereus Fund
Conservation Lands Foundation
County of Humboldt
Grace US Foundation
National Environmental Education
Foundation

National Fish and Wildlife Foundation
National Oceanic and Atmospheric
Administration

NRCS Regional Conservation Partnership
Program

Patagonia
PG&E
Ray and Marie Raphael
Redwood Community Action Agency
State Coastal Conservancy
Tarbell Family Foundation
Trees Foundation
US Fish and Wildlife Service
US Forest Service

MRC Members and Friends of the
Mattole

Mattole Salmon Group

1890 Lighthouse Road
P.O. Box 188 • Petrolia, CA 95558
Phone: (707) 629-3433
Fax: (707) 629-3433
Email: msg@mattolesalmon.org
Website: www.mattolesalmon.org



MATTOLE SALMON GROUP MISSION

The Mattole Salmon Group works to restore salmon populations to self-sustaining levels in the Mattole watershed.

BOARD OF DIRECTORS

Michael Evenson, President
David Simpson, Vice President
Gail Rosin, Treasurer
Lindsay Merryman, Secretary
David Buxbaum
Ray Lingel
Dylan Mattole
Campbell Thompson

STAFF

Richard Sykes, Executive Director
Linda Yonts, Bookkeeper
Sungnome Madrone, Project Manager
Drew Barber, Project Coordinator
Kate Cenci, Project Coordinator
Michelle Dow, Project Coordinator
Nick Tedesco, Project Coordinator
Campbell Thompson, Project
Coordinator
Nathan Queener, Project Coordinator

Valued staff with multiple duties:

Roberto Gramajo
Matt Knoedelseder
Brandon Madrone
Josh Madrone
Chad Paul
Gary "Fish" Peterson
Nathan Scheinman
Kris Shultz
John Summers
Aurora Tietjen
Morgan Twardowski

Thank You to our Funders...

Bella Vista Foundation
Bureau of Land Management
CA Department of Conservation
CA Dept. of Fish and Wildlife
CA Dept. of Water Resources
Cereus Fund
Conservation Lands Foundation
FishAmerica Foundation
Mattole Restoration Council
National Fish & Wildlife Foundation
National Oceanic and Atmospheric
Administration
Patagonia
Sanctuary Forest, Inc.
State Coastal Conservancy
Trees Foundation
The Nature Conservancy
US Fish and Wildlife Service
Wildberries

Sanctuary Forest, Inc.

315 Shelter Cove Rd., Ste. #4
P.O. Box 166, Whitethorn, CA 95589
Phone: (707) 986-1087
Fax: (707) 986-1607

Email: sanctuary@sanctuaryforest.org

Website: www.sanctuaryforest.org



MISSION STATEMENT

Sanctuary Forest is a land trust whose mission is to conserve the Mattole River watershed and surrounding areas for wildlife habitat and aesthetic, spiritual and intrinsic values, in cooperation with our diverse community.

BOARD OF DIRECTORS

Campbell Thompson • Eric Shafer
Janice Parakilas • Betsy Watson
Stuart Moskowitz • Michael Torbert
Victoria Shafer • Renee Crowley
Susan Bicknell

STAFF

April Newlander, Executive Director
Tasha McKee, Water Program Director
Galen Doherty, Lands Program Director
Katrina Nystrom, Program Coordinator
Kathi Hire, Bookkeeper and Grants
Manager
Anna Rogers, Education, Development
& Administrative Coordinator
Marylou Scavarda, Program Assistant

Thank You to our Funders and Supporters

Anadromous Fund
Bella Vista Foundation
Bureau of Land Management
California Department of Fish and Wildlife
CA State Water Resources Control Board
California Department of Water Resources
California Wildlife Conservation Board
CA State Coastal Conservancy
Cereus Fund
Conservation Lands Foundation
Firedoll Foundation
Fish America Foundation
Grace Us Foundation
Humboldt Area Foundation
Humboldt and Mendocino Redwood
Company
Kenny Brothers Foundation
McLean Foundation
Mendocino Fish and Game Commission
National Fish and Wildlife Foundation
National Oceanic and Atmospheric
Administration
Natural Resources Conservation Service
U.S. Fish and Wildlife Service
Pacific Coast Joint Venture
Patagonia
Weeden Foundation

Sanctuary Forest Donors
Participating Landowners

From the Executive Directors

By Nathan Queener, Richard Sykes and April Newlander



Dear readers and friends of the Mattole,

Another summer has arrived in the Mattole Valley: the California quail have hatched their chicks, now hustling along the roads and into the brush. The killdeer loudly protects her nest down by the river, cacophonously feigning a broken wing, leading us away. A pair of bald eagles soars over the water, as though they know it pulses with schools of juvenile Chinook salmon, growing and leaping in the evenings. The summer wind whips down an occasional tip of a cottonwood, which drifts downstream.

As we pause to remember Freeman House, the beauty of this valley sinks in. He, better than anyone, was able to describe it lyrically, in words whose beauty mirrored the valley. We miss him. But when we consider all he did, and who he was, we are not filled with sadness but with abounding gratitude. Freeman set our work in motion. In the words of C Moss and Ray Lingel, "He was a leader and catalyst in the best sense of what leadership is—powerful yet humble, hugely inspiring yet often in the background. There's a section in the Tao Te Ching that goes something like this, "The wise leader doesn't talk, s/he acts. When the work is done the people say—"Amazing! We did it all by ourselves." That's the kind of leader Freeman was."

We cannot begin to catalogue all Freeman did for this valley and its inhabitants, with press time upon us. Suffice to say that nearly all our work that you read about in this newsletter is an outgrowth of his vision. Like strawberry runners, bearing fruit when an original plant has gone, onward we grow.

The Mattole Restoration Council is busily preparing for our third annual Hoop House Hoedown, on July 21st. Please join us to celebrate restoration, eat good food, and enjoy some music. The MRC is also hard at work expanding our Fire and Fuels Program, which has been growing every year for the past several years, analogous to the threat of wildfire.

The Mattole Salmon Group is very pleased to announce that longtime Mattole landowner, Richard Sykes, is our new Executive Director. Richard comes with a wealth of relevant experience, including periodic residency on Conklin Creek. Since the 1980s, Richard has hiked the hills, fished the river, grown gardens and relished belonging to the Mattole Valley. Professionally, he served as the Director of Water and Natural Resources for the East Bay Municipal Utility District, based in Oakland. He oversees water supply and water resources planning, environmental stewardship activities, and land management of nearly 60,000 acres in the East Bay and Sierra Foothills. He is also responsible for the fishery and resource management activities on the Lower Mokelumne River, including a salmon/steelhead hatchery and much-lauded river habitat enhancement and maintenance program. A graduate of UC Berkeley with degrees in English, Conservation and Resource Studies, and Environmental Engineering, he is also a registered civil engineer.

Richard says, "My priorities at the MSG are continuation of the ongoing monitoring programs, determining what projects will best support self-sustaining salmon and steelhead populations, obtaining funding for and implementing those projects, and ensuring the continued good relationships with the communities and stakeholders necessary to accomplish this work. I am excited about the opportunity to serve the MSG and help the fish!"

Sanctuary Forest is excited to continue our Community Stewardship Education Program with landowners, especially in a time of increasing regulations and a shift in our economy. Many of us share the desire to live in harmony with our surroundings and have been doing so for many years. Sanctuary Forest wants to facilitate trust and communication among neighbors, wants to hear your stories and concerns, and provide technical assistance and resources that will serve you best. Additionally, we continue on our mission to address the low-flow problem in the Mattole River headwaters by restoring streamflows for fish through our innovative groundwater recharge projects, and creating water security for humans with the continuance of our Storage and Forbearance Program. In this issue, we highlight our progress on the String of Pearls project—terrace ponds at Baker Creek built to sustain streamflows later into the season and restore groundwater; we share our success with conserving Phase 1 of the Van Arken Community Forest—300 acres comprising the headwaters of McKee Creek where needed groundwater recharge projects will take place; and we outline the benefits of community organizing and forming a tributary collective.

As a last note, our partner groups would like to announce that the *Mattole Watershed News* will now be produced just once annually, every summer. We intend to redirect the resources we've been using for two annual newsletters to different forms of outreach, so stay tuned.

We thank you for your continued engagement and support of our work. 🐟

Sincerely,

Nathan Queener, Richard Sykes and April Newlander

Freeman House



Freeman House. Photograph courtesy of Mattole Restoration Council.

- continued from page 1

Freeman knew that for true recovery to be sustained, it would take enlisting the people living in their watersheds to do the work, to take it on with gusto, and to align with the currents inherent in dynamic processes.

Freeman was an original founder of the Mattole Restoration Council (MRC) in 1983 in order to bring all the groups that were working in isolation in one watershed together to discuss projects, priorities, and philosophies. Originally a 13-member council of groups, in 1998, under his direction, the MRC metamorphosed into an organization that implemented a myriad of projects—much as it continues to this day. Any attempt to encapsulate the legacy he left our community, or to other restorationists, would never be deep enough, hallowed enough, or complex enough, all traits which he embodied completely. So I turned to his friends.

One of the original members of the Council and the founder of Sanctuary Forest, Inc., Rondal Snodgrass sent this offering: “Along the Mattole there were Up-River People and Down-River People. The salmon migration connected these two elements of river culture. Freeman spoke of us as “reinhabitators,” showing us that we were planted here for higher purposes. He demonstrated and taught us with elegance the deeper ecology of our new culture’s purpose. I have been an Up-River Person emblazoned by headwaters, the old growth forests and watered spawning-ground streams. Freeman has been a Down-River Person, emblazoned with estuary, forest, prairie, and river mouth. Together with many, many others, we joined heart, mind and spirit to weave these elements together. Yes, we continue. This present time calls us to praise Freeman, an emblazoned elder for us all.”

And from Jerry Martien, close friend and North Coast poet: “Freeman House’s theory and practice was essentially this: restoration and recovery can’t be done from the outside. Both for the watershed and the person, it has to come from within. Freeman always seemed to be speaking—and writing—and acting from the heart. He also listened from the heart, and was constantly conducting and sharing his own scientific and cultural education. To be formulated, spoken about, and practiced, he would insist, in the vernacular—in terms that express a local culture. He was a dedicated naturalist and a full-on advocate for salmon’s place at the center of that culture, in the Mattole and throughout the Northwest. He was also a Digger, and saw that theater and music, dance and poetry could express those priorities—again, from the heart—and so nourish person, community, and place. He gave

himself to that task. In his essay “Afterlife” he provided his own memorial: “The Earth will claim me as its own. Which I am.”

David Simpson, a co-counder of the Mattole Salmon Group, writes: “In the fall of 1981, over 40 residents of various parts of the Mattole, having been trained in the then-esoteric craft of salmon species and redd identification, pulled on waders and spread out over the valley. It was the beginning of what was no doubt the first systematic survey of the spawners of an entire watershed to be conducted exclusively by residents of that watershed.

“It’s hard to recollect today that, back in 1981, these were far-out ideas and audacious acts. Even referring to the Mattole as a ‘watershed’ was new and mildly wonkish, but turning over the abstruse work of gathering accurate biological data that could help a wild species survive to a bunch of backwoods yokels like us? That was outright radical.

“Freeman House, co-founder of the Mattole Salmon Group and the Mattole Restoration Council, was not exactly a raving radical. He had indeed participated quite willingly in cultural events in the 60s and early 70s that sorely challenged existing paradigms. By the time he joined us here in the Mattole, though, to help build the watershed restoration idea into one of the central social movements of our times, his relationship to his fellows was typified by a quiet dignity and an exceptional conscientiousness. These traits would prove essential to the job ahead. He was, of course, a grand writer. He was also a truly inspired watershed administrator.

“Looking back, it’s reasonable to presume that when we started out, we had caught the salmon runs on a downswing and that this downward momentum continued, with a few aberrations both up and down, for over 30 years. The return of abundance—a river visibly full of salmon—seemed for much of that time a distant dream. Until, that is, the past two years and especially this year: a Mattole salmon surveyor’s delight. (See article at right.)

“It was, propitiously, Freeman’s last year with us. The incredible body of work that started with the hatchbox program and those first spawner surveys may (Note I say “may”—our coho runs have not recovered and the rebuilding of the Chinook population is still at a fragile early stage) have finally begun to pay off. Freeman’s quiet but hard-core belief in the power of inhabitants of a place, a watershed—in us—to alter the course of history is turning out to have been of great consequence. What might have been another inevitable chronicle of decline and disrepair could turn out instead to be the first chapter in a celebration of renewal and recovery. And we, people of the Mattole, have played the central role. Thank you, Freeman, and farewell old friend.”

Freeman was a watershed mystic—one who seeks, by contemplation and self-surrender, unity with the watershed. From his book, Totem Salmon:

“I walk in a world I have come to understand as mutable, ever-changing. My walk on the next morning carries me into streaming fog blowing off the Pacific into my face. The chill of it shortens my planned route and makes me wonder just how wide that line on that map that divides water from land should be.

The rolling hills around me seem still, but I know that they are not. All the land within my view is called by geologists an accretionary prism. In plainer language, the seemingly solid ground under my feet is made of rubble scraped off the Gorda plate as it dives beneath the North American plate. Such knowledge is occasionally enlivened by an adrenal rush that is a response to the rumble and roll of the earth, or by a series of sharp jolts that knocks the jars off the shelves in my home. It is the mountains around me rearranging themselves.

After a while, the movement of mountains rearranges the mind. I find in myself a new fluidity of response, a diminished sense of attachment, a more comfortable sense of humility. I am a different person than I was when I arrived in the valley. I may not be alone.”

No Freeman, you are not alone. 🐟

Collected essays by Freeman House are compiled and awaiting publication. Please check www.mattole.org for information.

They swam, they spawned, they decomposed: Chinook come back for a Chinook comeback?

By Nathan Queener, Mattole Salmon Group

Walking and boating Mattole streams on spawning ground surveys in the winter months is a treasure hunt. The early morning preparations and the (often slow bone-and-axle rattling) drive to the day’s survey reach are filled with anticipation: what will we see today? Sometimes, the answer is: nothing—or at least no sign of adult fish. There is always time spent in some of the most beautiful winter places in the watershed—gushing water, wet mossy forest, ghostly winter alders, the hypnosis of concentrating on walking upstream. I’ve never had a bad winter survey day, but sometimes there is no treasure, at least not the fishy kind.

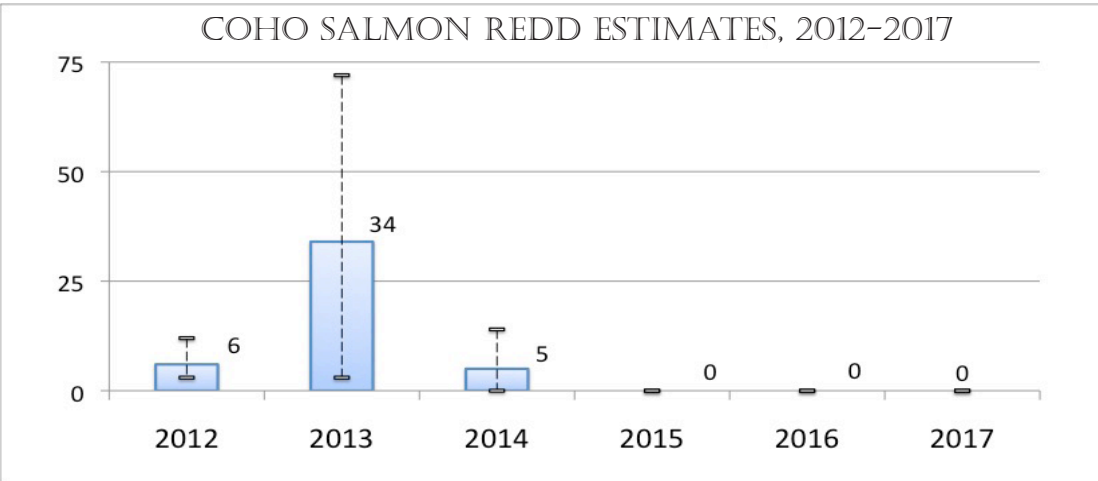
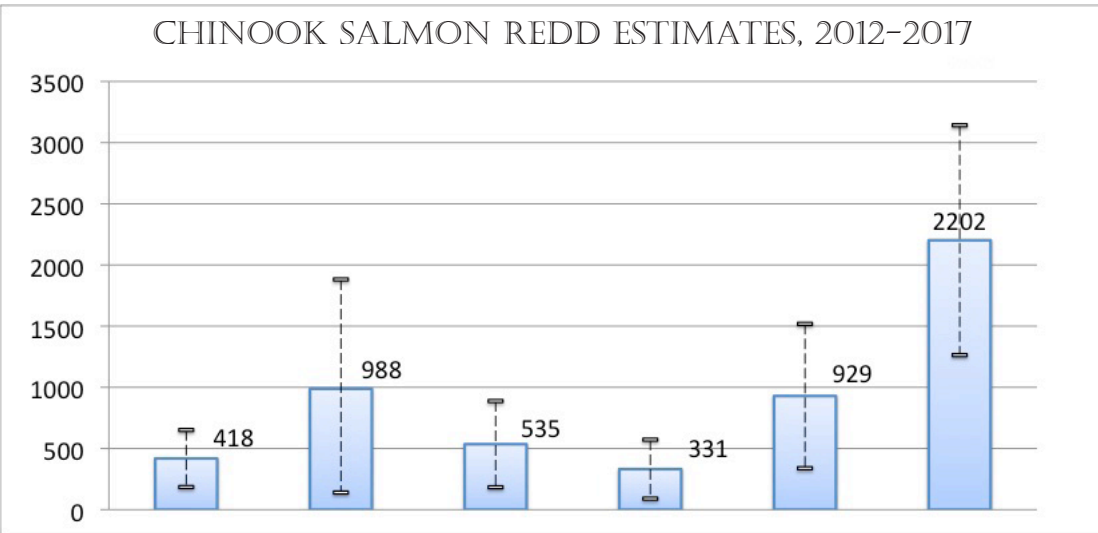
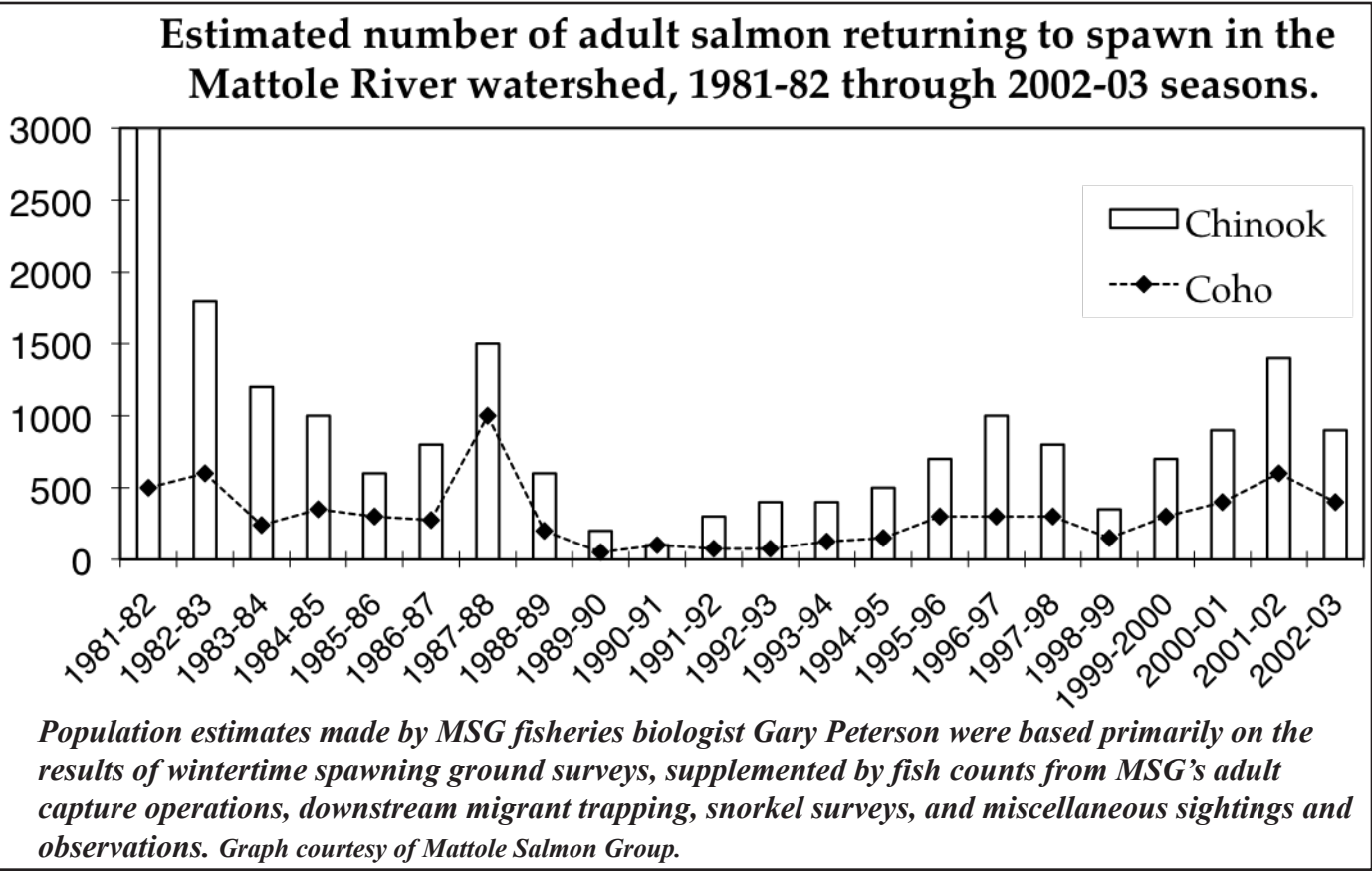
This past winter surveyors were generally spoiled by the number of Chinook salmon spawning nearly everywhere we were from November through mid-January. The past year’s Chinook run appears to be the strongest since the very first year the Mattole Salmon Group (MSG) conducted surveys in the watershed in 1981-82, 37 years ago. That year, the number of adult Chinook returning to the watershed was estimated to be 3,000 *fish*. For the 2017-18 spawning season, the mean estimate of the number of Chinook *redds* was 2,202.

Our estimate of redd abundance is more precise than fish abundance, but as a means of comparison we can figure that **each redd represents approximately two fish**. Therefore, **we estimate that ~4000 adult Chinook spawned in the Mattole this winter**.

The numbers from this past season are also impressive when comparing fish and redd totals from individual streams and reaches to past years’ data, particularly from 1994-2011. More live Chinook observations were recorded *this past winter in the lowest two miles of Bear Creek* at Ettersburg than the *total from the entire Bear Creek watershed in the 17 years from 1994-2011* (197 vs. 153 adult Chinook). In reaches in Thompson Creek, Honeydew Creek, South Fork Bear Creek, and the river between Ettersburg and Honeydew, the total number of Chinook redds recorded in the 2017-18 season also exceeded reach totals from that same 17-year period.

At this point you might be saying to yourself “Chinook, Chinook, Chinook—what about steelhead and coho salmon?” As encouraging as Chinook returns were this past winter, and have been in the last few years, coho numbers are at least as discouraging—or more so. No live adult coho salmon have been observed for the past three survey seasons. Summer snorkel surveys have detected juvenile coho each year, so we know a few adults (literally, a few) continue to return and spawn—far fewer than the low hundreds estimated through the 80s and 90s. This past winter offered no indication of a rebound in the coho population.

And for the sake of completion, a quick note on steelhead:



Above: Chinook and coho salmon *redd* estimates, 2012-2017. Each redd represents approximately two fish. For instance, we estimate that ~4000 adult Chinook spawned in the Mattole in winter 2017. Graphs courtesy of Mattole Salmon Group.

while funding dictates that our survey efforts focus primarily on salmon, it is apparent that steelhead continue to be abundant and widely distributed throughout the watershed.

I feel very lucky to be able to witness the near-magical Chinook abundance of the past several seasons. But it probably isn’t really luck, or magic: the rebound in Chinook numbers is likely the result of the work and stewardship of countless landowners, watershed residents, and restoration workers over the years and decades. Riparian vegetation is increasing in area and complexity. Fine sediment loads, while still of concern, are decreasing and streams are changing in response. It is up to all of us to ensure these trends continue. 🐟

Primary funding for this survey effort came from the California Department of Fish and Wildlife’s Fisheries Restoration Grants Program. We are grateful for additional support provided by the Bureau of Land Management’s Arcata Field Office, and the Bella Vista Foundation.

Forgetting and Remembering the Instructions of the Land: The Survival of Places, Peoples, and the More-than-human

By Freeman House

Editor's Note:

Digging around one day in the MRC files, I came upon the transcript of a lecture that Freeman gave at Ohio University on April 24, 1996. Having first listened to Freeman speak at my own University in Montana in 2001, I knew he possessed powerful ideas about the land and our place on it. Excerpts from his 1996 lecture are reprinted here, with gracious permission from his family.
Flora Brain, Mattole Restoration Council

I. Forgetting

Maps are magical icons. We think of them as pictures of reality, but they are actually talismans which twist our psyche in one direction or another. Maps create the situation they describe. We use them hoping for help in finding our way around unknown territory, hoping they will take us in the right direction. We are hardly aware of the fact that they are proscribing the way we think of ourselves, that they are defining large pieces of our personal identities. With a world map in our hands, we become citizens of nations. We become Americans, Japanese, Sri Lankans. With a national map in front of us, we locate ourselves in our home state: we become Ohioans or Californians. Unfolding the road map on the car seat beside us, we become encapsulated dreamers hurtling across a blurred landscape toward the next center of human concentration. Even with a topographical map, the map closest to being a picture of the landscape, we are encouraged to describe our location by township, range, and section—more precise, more scientific, we are told, than describing where we are in terms of a river valley or mountain range...

II. Remembering

I live in a place that has perhaps 50 years less industrial history than yours does, and quite a bit more of the original fabric of life is left, though tattered. Nevertheless, my own processes of remembering have taken some work. I have found that doing my remembering personally and privately doesn't get me where I want to go. I have discovered that the reconstruction of inhabitory mind (an ultimate goal of reinhabitation) is a collective process, as is any economy of place. The wisdom of the group is a far more powerful thing than the sum of its individual components. Further, I have become convinced that it is not possible for a single mind to comprehend the life processes of even an area as small as my 300-square-mile watershed. Neither will a community of minds ever arrive at total comprehension of the system which contains it. But a human community striving to act out its perceptions of the instructions of the land can at least hope for a growing resonant wisdom...

*“I'll return home now
and continue my exploration
of community and place...
Meanwhile our struggle to remember
continues in the form of a conversation
with the creation as it is, for
there is no separate world.”*

I'll return home now and continue my exploration of community and place... Meanwhile our struggle to remember continues in the form of a conversation with the creation as it is, for there is no separate world. To paraphrase Wendell Berry, "...A [culture] using nature, including human nature, as its meaning would approach the world in the manner of a conversationalist...



Freeman House. Photograph by Amanda Malachesky.

It would not proceed directly or soon to some supposedly ideal state of things. It would proceed directly and soon to serious thought about our culture and our predicament. The use of [a] place would necessarily change, and the response of the place to that use would necessarily change the user. The conversation itself would thus assume a kind of creaturely life, binding the place and its inhabitants together, changing and growing to no end, no final accomplishment, that can be conceived or foreseen.” 🐟

Please Join Us for a
Celebration of Life of Freeman House
August 18, 2018, 3 pm
at Mattole Camp and Retreat Center
PLEASE RSVP and contact Laurel with
questions: lfanya@gmail.com

Come Gather 'Round, People! Tributary Collectives and Community Organizing in the Mattole River

By Galen Doherty, Sanctuary Forest, Inc.

In 2015, thanks to funding from the California Department of Fish and Wildlife (CDFW) and the Grace Us Foundation, Sanctuary Forest began an outreach and education effort in several tributaries to the Mattole River – in the headwaters: Thompson, Ravashoni, McKee, and Bridge Creeks; in the mid river: Mattole Canyon Creek; and in the lower river: East Mill Creek – with the ***purpose of increasing cooperative solutions to shared problems.***

Extreme low flows, poor roads, heavy fuel loads, and so many more resource management issues are bigger than any one landowner can address. To tackle these problems in a cost-effective and timely manner, ***people need to work together!*** Our vision was to facilitate the formation of Tributary Collectives: *voluntary, non-regulatory associations of landowners and residents who all live within a given tributary watershed and agree to work collectively to address shared problems.* We went about this by holding 2-3 meetings in each of these tributaries and collecting streamflow data to better understand the characteristics of each tributary. In addition, we conducted an anonymous survey to learn more about the residents/landowners: what they value about their watershed, how much water they use and where they get it from, and what issues/ concerns they have about their community and environment. Chief among these shared issues was the need to establish road associations; however many participants also expressed interest in working together on shaded fuel breaks, emergency water storage for firefighting, and cooperative solutions to water scarcity. By getting folks together in the same room (generally one of the landowner's homes in the watershed), residents saw how interconnected they are with their neighbors, felt better equipped to apply best management practices (BMPs) on their land (regardless of land-use activity), and were more inclined to work together to address shared issues.

The Green Rush is only the latest boom in the North Coast economy. Today, 6 months into cannabis legalization in California, our community is faced with an impending bust, and many of these small rural landowners directly or indirectly reliant upon cannabis-related income streams will be substantially negatively affected by the loss of this primary economic driver. People who have lived their entire lives under prohibition are faced with an existential crisis: enter into a brand new market and one of the most regulated industries in the nation, or take your chances and continue to operate illegally. If choosing the former path, they face uncertainty with every step: a legal market dominated by big agricultural producers, increasingly strict environmental regulations, unreasonably high fees and taxes, and a maze of permit requirements from a myriad of agencies.

“These tiny, marginalized businesses are the heritage producers who make up the traditional cannabis production methodology, and we are the most at-risk in the changing marketplace. We need to build models that can help support and maintain small farms; I have long believed that cooperatives are the way to do so. Helping to achieve economies of scale and amplifying shared goals and values, the cooperative model offers a chance for these businesses to work together to address shared circumstances and to thrive in a shifting landscape.”

—Casey O'Neil, Vice Chair, California Growers Association

Increasing regulatory and enforcement pressures are not solely limited to the cannabis industry. With extreme low-to-no flows occurring more frequently in many streams across the North Coast, higher-than-average temperatures becoming the new normal and fish populations continuing to slide, resource agencies are increasingly concerned about addressing the cumulative impacts of all watershed residents, and all land uses. Want to store



Tributary meeting on McKee Creek. Above right: Streamflow monitoring in Mattole Canyon Creek. Photograph courtesy of Sanctuary Forest, Inc.

water diverted from the creek/spring for more than 30 days? You'll need a Small Domestic Use Registration (domestic water right) for that. Want to sell that produce or trade it with your neighbor? You'll need a Small Irrigation Use Registration (commercial water right) to do that. Both of these water rights may necessitate a Section 1600 Lake/Streambed Alteration Agreement with CDFW, and during a site visit they may tell you to upgrade all of the culverts on your property to their “new standard” 18” diameter, mandate strict forbearance protocols forcing you to stop diverting and invest in more storage (if you can), or require you to address legacy land-use impacts—many of which occurred over 30 years ago. These strict regulations come with the intention of protecting water sources for humans, fish, and wildlife and improving land management practices, but oftentimes they are unnecessarily complicated, take several years to work through, are overly burdensome to small landowners, and lack any real incentives, especially for those just trying to make ends meet.

“Officials need to recognize that there are simply too many people on the landscape to enforce their way to regulatory compliance... landowners need clear incentives from their local and state institutions that encourage adoption of best management practices, through tax credits, or other financial incentives... otherwise the participation of small private landowners will continue to lag and resource management agencies will continue to struggle to make meaningful changes in land management practices.”

—Sungnome Madrone, Project Manager, Mattole Salmon Group

In today's economic climate, working more closely with your neighbors and being a participatory member of your community may make the difference in being able to stay working on the land or taking an off-property job to supplement household income. Throughout the North Coast region, nongovernmental organizations are shifting their approach from working on a parcel-by-parcel basis, to a broader, tributary-based, strategy that seeks to get all of the stakeholders to the table to address water scarcity and other shared issues. A Coordinated Water Management Plan (CWM) is a template being developed by Sanctuary Forest, Trout Unlimited, the Salmonid Restoration Federation, and the Nature Conservancy. The goal is for tributary residents to **voluntarily commit to a simple, workable framework to coordinate instream diversion rates** (pumping less than 10 gallons per minute) **and times** (half the residents divert on odd days, the other half on even days) **to reduce cumulative impacts.**

See “Tributary Collectives” - continued on page 11

Value of Land Conservation for Drought Resilience and Community Water Supplies

By April Newlander, Sanctuary Forest, Inc.

Conserving land means more than just saving trees. When Sanctuary Forest formed in 1987 to save the remaining old growth forests in the Mattole River watershed, the value of the headwaters as the key spawning and rearing habitat for declining populations of native salmonids attracted funding from conservation groups and agencies. Today, Sanctuary Forest continues to protect remnant intact forestlands and strives to restore the river and recovering forests that have undergone intensive logging, road building and other adverse land-use impacts. Moreover, longer, hotter and drier summers—climatic changes that are predicted to persist—have led to severely diminished streamflows in tributaries throughout the Mattole headwaters. Low flows are one of the key limiting factors to coho salmon recovery in the Mattole, and for the past 14 years Sanctuary Forest has been working towards restoring streamflows using 2 strategies: changing human use through our Storage and Forbearance Program (storing water in tanks and forbearing from summertime diversions), and restoring ground and surface water through groundwater recharge projects (See pre- and post-project pictures of Baker Creek groundwater recharge projects).

Since 2016, Sanctuary Forest has been working on a landscape-scale conservation project: the Van Arken Community Forest Project. Spanning over 1,600 acres, comprising the headwaters of McKee Creek and the entire Van Arken Creek watershed, over half of these lands were logged in past decades and contain dense, monoculture forests that need to be managed to restore forest health and resilience to fire. Additionally, McKee and Van Arken creeks both have been identified as Priority 1 tributaries for coho recovery in local and regional watershed recovery plans, underscoring the need for watershed-scale conservation and restoration.



Above: Low flows in Van Arken Creek, September 2016. Photograph courtesy of Justin Robbins.



Conserving land and subsequent groundwater restoration projects in the headwaters of McKee Creek are critical to increasing streamflows for downstream fish, wildlife and human populations. All of the private landowners on the lower reaches of McKee Creek have demonstrated an exceptional commitment to habitat restoration and stewardship efforts in the watershed, including their participation in the Storage and Forbearance Program. Thanks to the efforts of these landowners, the entire mainstem of McKee Creek will be free from all dry-season diversions by the summer of 2020. Storage of water in tanks for 3-8 months is an immediate solution, but is much more costly than conservation of land paired with groundwater restoration. In fact, the Pacific Forest Trust has identified “watershed conservation as one of the least expensive solutions to ensure greater water quantity, quality, and security.”

The Van Arken Creek watershed is completely free from human development and poised for watershed recovery efforts. Julie Weeder, NOAA Fisheries Recovery Coordinator, has deemed Van Arken as “vital to current efforts to restore salmon populations in the Mattole River watershed.” Tasha McKee, Sanctuary Forest’s Water Program Director, estimates that Van Arken has the potential to increase surface and groundwater storage capacity by a minimum of 50 million gallons. For long-term sustainability, restoring our natural infrastructure (the land)—at a scale large enough to sustain summertime flows for fish and human water supplies—is vital.



The California Wildlife Conservation Board (WCB) recognizes the need to conserve watersheds for streamflow enhancement. In February 2018, Sanctuary Forest received an award from the WCB Proposition 1 Streamflow Enhancement Program for the acquisition of 300 acres in the headwaters of McKee Creek (Phase 1 of the Van Arken Community Forest Project) and the implementation of a groundwater recharge project on the property. Combined with other funded projects on McKee Creek (Storage and Forbearance & 3 groundwater recharge projects) there is potential to increase surface and groundwater storage by 7 million gallons and enhance streamflow by 44 gallons per minute (gpm), or 0.1 cubic feet per second (cfs). Even a little flow equates to a lot of habitat for juvenile salmonids. In a stream like McKee Creek, where the flow stops altogether in drought years, even a trickle is enough to keep pools from drying up. In most of the McKee Creek mainstem, flows of 8 gpm (0.02 cfs) are sufficient to keep most pools full and sustain adequate water quality (dissolved oxygen) for survival, and with flows of 45 gpm (0.1 cfs), rearing conditions—and survival of young salmonids—are greatly improved.



Above: McKee Creek in August 2014: dried-up creek bed and disconnected pools. Photograph courtesy of Sanctuary Forest.

Putting wood back into streams to create habitat complexity, raise the stream channel and store more groundwater.

Far left: Baker Creek, Pre-project, July 2013.

Left: Post-project, October 2013.

Photographs courtesy of Sanctuary Forest.

Special thanks to the WCB, who have graciously awarded Sanctuary Forest in 3 consecutive years of the Proposition 1 Streamflow Enhancement Program. Also, thanks to Weeden and Bella Vista Foundations—family foundations who I have had the pleasure of taking on personal tours of Van Arken—Firedoll Foundation and Patagonia, who see the importance of protecting forests for greater ecosystem and community values. Many thanks to the landowner Boyle Forests for their patience as we work to secure funding for the Van Arken Community Forest, and to all those who have contributed to the project and have gotten us one step closer to restoring drought resilience and mitigating the effects of climate change in the Mattole River watershed. 🐟

Groundbreaking Work in Baker Creek

By Marylou Scavarda, Sanctuary Forest, Inc.

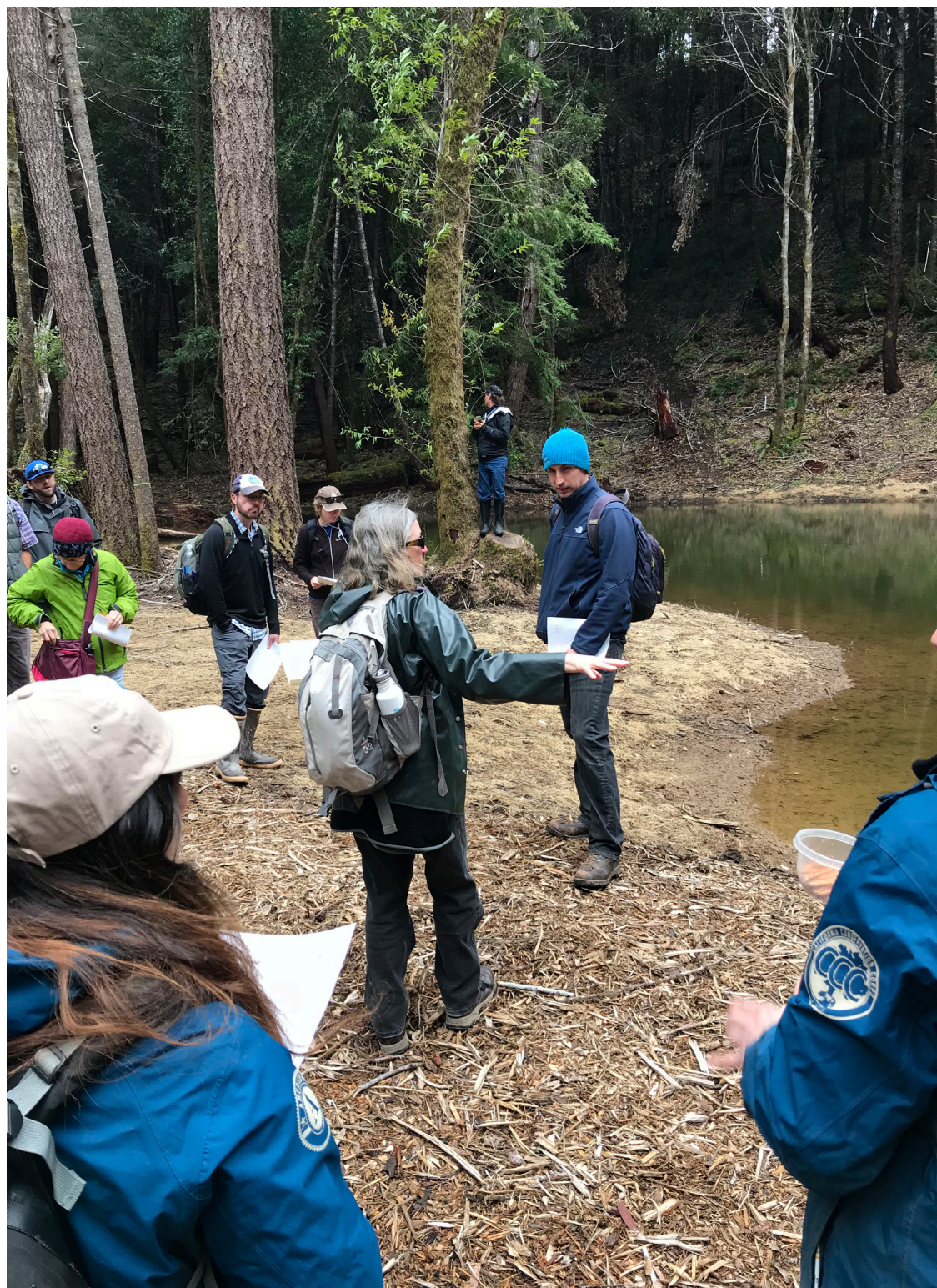
In 2015, the California Wildlife Conservation Board (WCB) boldly funded Sanctuary's Forest's (SFI) innovative Baker Creek Streamflow Enhancement Project. Partnering with Bureau of Land Management (BLM), Stillwater Sciences, and John Neill Construction, we began implementing the project last summer. By fall 2017, construction of two ponds on a BLM-owned terrace adjacent to Baker Creek was completed. Three more ponds will be constructed this summer. Locally, the five ponds are known as the 'String of Pearls.'

Will Baker Creek's String of Pearls fulfill its promise to keep Baker Creek flowing in late summer? During the past six months, Tasha McKee, Shane Dante (SFI), Sam Flanagan (BLM), Joel Monschke (Stillwater Sciences), John Neill and Anthony Lovatto (John Neill Construction) spent time at the pond sites, paying close attention to what was happening. This story is about what they have learned so far, and what the future might hold.

October 19th brought the first significant rainfall in our 2017-18 rainy season. By January 11th, 25" of rain had fallen in the Mattole headwaters, enough to fill both ponds. "It took less rain than we expected," says Tasha McKee, SFI Water Program Director, "and the ponds continued to fill during short dry spells between storms." Joel Monschke, Stillwater Sciences engineer and geomorphologist, explains. "In addition to being filled directly by the rain, the ponds also capture water flowing through relatively shallow subsurface channels originating from up-slope precipitation." It's a dynamic process with some mysterious things happening. "As expected," he says, "we saw the pond surface water levels quickly drop by about 4' when the rain stopped. We believe that when the pond is full, higher water pressure pushes pond water into the adjacent soils. That's what we want!" After that, he explained, the continuing drop in surface water levels slowed down. "Deeper in the ponds, the ground is less porous; there's less area for water to infiltrate the ground, and lower water pressure."

Pond-building requires close attention to excavated soil. The proportions of clay, sand and gravel influence the water's infiltration rate into adjacent terraces. John Neill and Anthony Lovatto constructed the first two ponds last summer. "We played around with how much to seal the ponds," Neill said. "We wanted them to 'leak' into the surrounding ground, but we wanted them to hold water, too." They used two different methods to seal those ponds. "In one," Lovatto says, "I excavated and pushed the dirt around with the dozer to create terraces, then compacted the soil." In the other pond, Neill says, they made three piles of excavated soil, sorting according to clay, gravel and sand content. Then, hoping to create the perfect seal, they mixed up soil from all three piles, adding more non-permeable soil (clay) than in the first pond before compacting the bottom of the pond area. "The pond where we used this method is holding water better," Neill says. "We'll probably do something similar for the remaining three ponds."

Shane Dante, SFI Water Program Coordinator, monitors water levels in wells surrounding the ponds every fortnight. Despite significantly less rainfall than in 2016-17, the surrounding soils were saturated several times over the winter of 2017-18. His measurements revealed increased water levels in certain wells adjacent to the ponds, more so than in prior years. "The groundwater levels are still declining as the dry season continues, but the higher levels have lasted longer and declined more gradually, even in this much drier year. As we enter the dry season,



Above: Tasha McKee & Joel Monschke leading tour at Baker Creek terrace pond. Photograph by Shane Dante.

incoming data is encouraging, but it's too soon," he says, "to draw any final conclusions." He also noted that, as hoped, the ponds seem to be restoring wetlands. He's seen tadpoles, mallards and wood ducks in both ponds, a beautiful sight.

According to Joel Monschke, completion of three more ponds in Baker Creek's String of Pearls will probably influence the rate at which the first two ponds fill. "The new upstream ponds will likely intersect the subterranean flow paths, thereby reducing the rate at which the lower ponds fill early in the wet season. However, the five ponds working in sequence will have the capacity to capture significantly more wet-season runoff, augmenting groundwater storage in the area, and likely leading to increased dry-season stream flows."

"The ponds are 'leaking' into the ground as evidenced by the monitoring data," says BLM geologist Sam Flanagan. "We will gain crucial groundwater information in the next several weeks. This is a pilot project with an iterative process, so going forward our team will be talking about ways to fine tune the infiltration rate." Flanagan stressed, "Additional monitoring data collected this summer and next winter, when all five ponds are working together, will provide us with vital information for fine tuning our designs and informing future projects of this type."

We have yet to find out if groundwater stored near the ponds will remain there long enough and be released slowly enough into Baker Creek late this summer so that its streamflow can provide enhanced habitat for fish, but what we've observed so far is very encouraging. On May 24th, the California State Coastal



Baker Creek pond filled with winter rain. Photograph by Shane Dante.

Conservancy authorized funding for the Mattole Headwaters to finish the Baker String of Pearls and to implement several innovative project designs in Lost River. We are filled with gratitude to them for making it possible to engage in this seminal work.

Many thanks to our project funders: California State Coastal Conservancy, Wildlife Conservation Board, Bureau of Land Management, and the following foundations who have made this work possible: Bella Vista, Weeden, Firedoll, and Patagonia. 🐟

Retail Lumber and Building Supplies

Whitethorn Construction

P.O. Box 400 • 545 Shelter Cove Road • Whitethorn, CA 95589 • (707)986-7412 • Fax (707)986-7413

Tributary Collectives

- continued from page 7

By adopting a CWM Plan and a shared set of stewardship practices (such as those outlined in the Sanctuary Forest Land and Water Stewardship Guides), folks are taking a big step towards becoming a "tributary collective." Furthermore, they can experience an array of benefits, including: water rights with reduced forbearance (no-pump) periods that will translate into cost savings (i.e., buying fewer water tanks), expedited or group permitting of 1600 Agreements, bulk discounts on water tanks, and grant funding opportunities/shared costs for road work, fire safety, groundwater recharge, and more! Just getting to know your neighbors better can also be helpful with the many small day-to-day needs such as carpooling, shared child care, big push days on the farm or ranch, you name it!

This spring, Sanctuary Forest was awarded additional funding from Humboldt Area Foundation, Grace Us Foundation, and CDFW to continue this important work. Over the next 3 years we will be conducting outreach and education efforts in collaboration with the Mattole Restoration Council and the California Growers Association, in the above-mentioned tributaries as well as three new tributaries in the mid-river: Blue Slide Creek, Eubanks Creek, and the South Fork of Bear Creek. We plan to begin outreach in these tributaries this summer and will hold the initial tributary meetings in late August through late

September. We will be sharing streamflow data, and offering free consultations with permaculture consultants and water rights specialists. If you are interested in learning more or would like to get involved, please reach out! Call Galen at 707-986-1087 ext. 3# or www.sanctuaryforest.org. 🐟



Streamflow monitoring in Mattole Canyon Creek. Photograph courtesy of Sanctuary Forest, Inc.

Local Youth “Step Up” with assistance from the MRC

By Theresa Vallotton, Mattole Restoration Council


Before he left office, President Obama passed the Workforce Innovation and Opportunities Act. Funded through Caljobs and known as STEP Up, this program awards grants to community organizations to help youth gain work experience or pursue an education towards increasing employability. Each participant is individually assessed and offered supportive services tailored to help them achieve their potential. Working with local schools, community organizations and businesses, our goal is to help our youth build their lives and fulfill personal goals.

Both in-school and out-of-school youth, ages 14-24, qualify for this employment program. (Note that the poster below is targeted for youth aged 16-24, but the program serves youth aged 14-16 as well.) This program is especially suited to youth who are facing challenges, including: not enrolled in school; needs assistance with gaining basic skills; has a disability; is currently homeless; a runaway; an offender; in foster care or aged out; in out-of-home placement; an English language learner; pregnant or parenting; or low income.

The MRC has had the pleasure of working with a number of noteworthy young people in the past year, and local businesses who have stepped up to work with us have expressed appreciation for this program. We are gratified to have assisted our youth in very significant ways. Seven have gained work experience in local

businesses. Two have been working in the Mattole Restoration Council’s Native Plant Nursery. One now has full-time employment with the Blue Moon Gift Shop and has moved into a management position. Another has secured part-time employment doing online marketing for the Garden of Beadin and building websites, with potential to take on her own clients. Another worked at the Bootleg clothing store doing sales. He is also working to complete his credits for a high school diploma after dropping out last year. Another young man has been placed with Greenwired, installing solar panels and working in the renewable energy solutions store. Another has signed up for College of the Redwoods and found his own employment for the summer at Ray’s Food Store in Garberville. A few youth have been taking a Workplace Readiness class at the College of the Redwoods campus in Garberville. And we supported a young mother who now has obtained her own business license for a permaculture business called “Fuerza De Vida.”

We are currently working with Downing Electrical to take on our first client of the year. He is on a path to become an electrician and just needs this experience to set him on his way. Supportive services are much needed. We have referrals from the local high school for new youth to support, and there’s much work ahead.

If you would like more information about this program, please contact Theresa at 707-986-7797 or theresa@mattole.org. 

*Out of school and need to find your path?
Need to finish school or get your GED?
Are you pregnant or a young mother?
Interested in PAID on-the-job training?
Need support paying for college books and tuition?*

STEPUP gives youth 16-24 a ‘leg up’

We offer:



- Job search help
- Work experience
- Academic support
- And much more...

Financial Assistance

- Transportation
- Clothing
- Books & Supplies
- Tuition

STEPUP
for youth jobs

Contact Us!
Contact Theresa Vallotton
(707) 986-7797 or theresa@mattole.org
Or visit us online at www.mattole.org/stepup





USED REDWOOD LUMBER

OldGrowthTimbers.com 707-629-3506

Magic Tails

By David Buxbaum, Mattole Salmon Group

There is strange magic in a river, and the Mattole conjures more than its fair share. The river meanders through our valley, scours and shapes our land, taking from some, giving to others, sustaining all. From frogs to turtles, lamprey to salmon, ranchers to growers: the river is the primal force that binds us together in the magical web we call life on the Mattole.

And so it’s no wonder that this river can cast potent spells. Spells that sometimes lead to oddly powerful obsessions. I confess, and give testament to such an obsession here: the pursuit of the mighty steelhead (*Oncorhynchus mykiss irideus*). An anadromous form of the coastal rainbow trout, the steelhead bless us each year with their winter return to the river, coming home after 2-3 years in the perilous waters of the Pacific. The fish return to spawn in their natal waters, as did countless generations before them, in a beautiful necromancy that we humans do not yet fully understand. Unlike salmon, steelhead can make this journey several times in their lifetime. When ready to spawn, the female clears a small depression (known as a redd) in the gravelly streambed by turning on her side and beating her tail. She deposits her eggs into the redd, a male soon moves in to spread his milt (sperm), and the female covers the fertilized eggs with gravel. A month or so later, the fry emerge. I sometimes see redds when hiking up small tributaries in the winter. If I’m very lucky, I see the females in action. It is a beautiful sight.

Juvenile steelhead remain in the river for one to three years. I often see these young fish in the summer, holed up in the deeper pools, feeding on caddisflies, mayflies, and other aquatic macroinvertebrates.

As a sport fish, steelhead are remarkable - Oh, how I love to fish for these noble creatures! It is said they can swim up to 30 mph, so when they hit your line at a speed near that, you know you have a fish on. But it’s their acrobatics that make them so compelling. You are nearly guaranteed to get at least one big leap, and often two, three, or four jumps before they are in the net. I once had a steelhead jump right out of the water onto the shore! Steelies are powerful fish, and they put up a tremendous fight.

Steelhead Grimoire

I don’t claim to be an expert angler, just an obsessed enthusiast. But I can offer a few tips that fellow anglers may find helpful in their pursuit of steelhead in the Mattole. I fish mostly from shore because I have access to a large stretch of river front, and because I often fish solo. While I love to fish from a drift boat, it requires a lot more work, extra bodies, and, well, a boat. I’ll admit it, you can cover a lot more river and catch more fish on a float. But hey, we do what we can. Here are some helpful tips:

- First and foremost is color. I can’t tell you how many fruitless hours I’ve spent fishing in off-color water. In my experience, it’s an utter waste of time to be fishing in slate - the river must start to show that beautiful blue-green (a.k.a. ‘bleen’) tint before you can expect to catch fish. Some years pass with very few fishable days. Sadly, the Mattole is quick to muddy, and slow to clear.
- Know the flow. Tackle and technique differ greatly based on flow: high water will favor heavier weight and stronger line, while low, clear water likes a small hook and tiny bead. Get current flow data for the Petrolia USGS gage by texting ‘11469000’ to waternow@usgs.gov. The system will text you back current streamflow (in cubic feet per second) and stage (the water level above some arbitrary point in the river; commonly measured in feet).



Above: The lower Mattole River. Photograph by David Buxbaum.

- Fail fast. From any given spot on the bank, expect to hook a fish within the first dozen or so casts, or not at all. So unless you plan to wait for fish to come to you, be prepared to move on as needed.
- Throw a change up. It’s super frustrating when you know there are fish in front of you, yet you can’t get them to bite. I go out with a few different setups and two rods, all ready to go. Switch colors on your spin-glow, yarn, beads, try different plugs, etc. Changing it up will often find the bite.
- Fish legal. It is imperative to know and follow current regulations. California Department of Fish and Wildlife wardens enjoy a good float down the river as much as anyone. They also like hanging out at the common take-out spots. And of course, taking fish or using illegal tackle builds a huge karmic debt that will be paid at some point! Here is a quick overview of the current regs:
 - Catch and release only. Avoid handling fish, or removing them from the water.
 - Only artificial lures with barbless hooks may be used. I like to use single barbless, as they are much easier on the fish and more challenging for the angler.
 - Season runs January 1 - March 31. A restricted summer season (Stansberry Creek to Honeydew Creek) opens the fourth Saturday in May through Aug. 31.
 - The first 200 yards from the mouth is always closed.
 - The river is often subject to low-flow closures. Check the DFW site as needed: www.eregulations.com/california/fishing/freshwater/

See you on the river! 



Above: Angler Chad Smith with a steelhead caught on the fly below Honeydew, January 2015. Photograph by Jake Hashagen, courtesy of Chad Smith.

MRC offers Revegetation Services to landowners

By Hugh McGee, Mattole Restoration Council

Bare soil and/or recently graded soil creates a great opportunity to return native plants to your property. Whether you are trying to restore a forested landscape, or grassland or wetland areas, the MRC can provide you with professional native plant design and installation services, at competitive rates. If you need revegetation or erosion control services for RRR (retiring, remediating, and relocating cultivation sites), CMMLUO (Commercial Medical Marijuana Land Use Ordinance), or anything else, please contact us with questions about how we may help you restore native vegetation on your land: Hugh@mattole.org



Native Plants Available for Sale

By Veronica Yates, Mattole Restoration Council

Whether you're looking for wildflowers, trees, grasses or shrubs, let the Mattole Restoration Council's Native Plant Nursery be your first stop in search of native plants! We have a wide variety of plants available for sale this summer/fall season, including pearly everlasting, columbine, iris, oceanspray, madrones, native bunchgrasses and much more.

Need more than just a couple plugs? We can grow what you need, just ask! If you haven't fallen head over heels for some of our small, local beauties yet, come on by the nursery – located at 234 Chambers Road in Petrolia – on Mondays or Wednesdays, and let our natives inspire your garden.


Go to www.mattole.org/resources/native-plants and click on the current plant inventory link to find a list of available species and prices. You can also contact Veronica at the MRC for questions about our Native Plant Nursery: 629-3514 or veronica@mattole.org.

Chipper Days Offer Fire Safety Assistance

By Ali Freedlund, Mattole Restoration Council

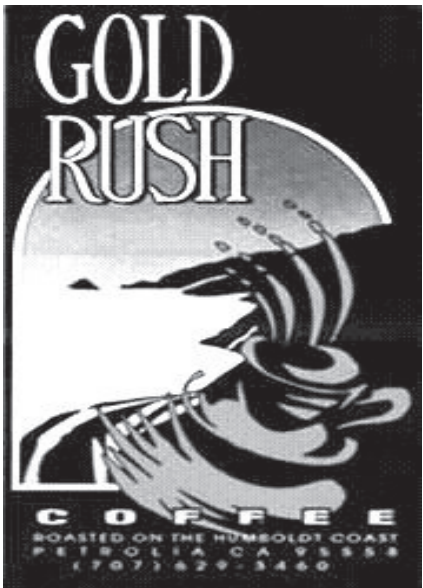
Rain or Shine, the Chipper Crew can come to you! This summer, MRC's chipper crew is available for hire and even for free for qualifying residents in the Petrolia, Honeydew and Ettersburg areas. Mattole Chipper Days 2 is a free program funded by Pacific Gas and Electric for residents who fit one or more of the following categories: senior citizen, low-income, or alter-abled AND whom are within close proximity of PG&E lines. Wildfire season has begun and it takes a community to ensure the safety of all of us. PG&E has generously funded a second year of this free program to treat hazardous fuels around homes of those who do not have the wherewithal to do the work themselves. If you can (or know someone who could) benefit from this opportunity of having crews treat the defensible space zone (within 100' of a structure), please contact John or Ali at 629-3514.





Pacific Watershed Associates
P.O. Box 4433 Arcata, CA 95519
www.pacificwatershed.com • 707-839-5130

- Geology/Engineering reports, Landslides
- Soils/testing/remediation, Septic system design
- Stormwater plans (SWPPP), Low impact drainage (LID)
- Road/Bridge/Culvert design, Drainage, Pond design
- Grading plans, Erosion control plans, Cleanup orders
- County environmental violations, Permits, CDFW 1600 Notices
- R1/R2 reports, Water rights, Water monitoring, Water quality
- Whole Farm planning, Cultivation compliance



GOLD RUSH
COFFEE
ROASTED ON THE HUMBOLDT COAST
PETROLIA, CA 95558
(707) 429-3450

MRC and Partners Receive National Award for Estuary Restoration

By Hugh McGee, Mattole Restoration Council

In May, the Mattole Restoration Council, Mattole Salmon Group and BLM Arcata were awarded the Riparian Challenge Award for excellence in riparian management for the Mattole River Estuary Riparian and Fish Habitat Restoration Project. It was awarded by the American Fisheries Society at the annual AFS conference, held this year in Anchorage, AK. The award was given "for special recognition on behalf of your efforts, interdisciplinary skills and leadership so capably applied toward protection, enhancement, and overall management of riparian zones within the Mattole River Estuary Riparian and Fish Habitat Restoration Project."

This work included restoration of 250 feet of slough, installation of 11,000 feet of trenched willow (15,000 large cuttings), placement of 400 whole trees by helicopter, installation of over 1 mile of livestock exclusion fencing, and the planting of over 15,000 riparian plants grown at the MRC nursery.

The award is a great honor and a testament to all the hard work many people have done to get us here. This was made possible by a solid partnership between BLM, MSG, MRC, Queen Construction, Mike Evenson, and staff from many other state and federal agencies. And of course Sungnome Madrone's incredible drive to take the vision and make it happen.

Phase 2 of this project has now begun, and includes another 500 feet of slough excavation, installation of 7000 feet of trenched willow, and planting of 4000 riparian plants grown at the MRC nursery. 🐟



Above: Members of the Mattole Technical Advisory Committee, including BLM staff, and staff and board from the Mattole Restoration Council and Mattole Salmon Group, CDFW, NOAA, SCC, Mike Love and Associates, and USFWS, pause during a recent field trip to the Mattole River Estuary Riparian and Fish Habitat Restoration Project. Together, BLM and the two Mattole groups received a recent American Fisheries Society award for their collaborative work on the project. Photograph courtesy of Chris Heppe.

Redway Liquor & Deli

proud supporters of Mattole watershed restoration.

(707) 923-3913
3362 Redwood Drive
Redway, CA

The Mattole Restoration Council's 3rd Annual

HOOP HOUSE HOEDOWN

Saturday, July 21

MRC Native Plant Nursery | 234 Chambers Rd.

5 -7 pm: \$10 BBQ Dinner

6 – 10 pm: Live Music & Raffle

Lyndsey Battle & Cory Goldman

The Mattole Mudstompers

BYO plate and utensils for \$1 off dinner!

All proceeds benefit local restoration!



Get to Know the King Range!

Upcoming hikes deepen our experiences of the National Conservation Area

By Flora Brain, Mattole Restoration Council

Did you know that the King Range Alliance—Sanctuary Forest, Mattole Restoration Council, Mattole Salmon Group, and Lost Coast Interpretive Association—offers a number of free, interpretive hikes in and around our beautiful backyard, the King Range National Conservation Area?

Join us for an easy saunter or a hard-core excursion, with the family or on your own, to help quench your thirst for some wild lands and learning! Here is a short list of upcoming activities over the next few months, and who to contact for more info.

Sinkyone Indian Land, Water & Culture Hike

Difficulty: Easy Walk

Sinkyone Wilderness State Park

Leaders: Representatives of the Sinkyone Intertribal Council

Saturday, July 21

Contact: Anna at SFI: 986-1087 ext. 9# or email Anna@sanctuaryforest.org

Full Moon Hike to King Peak

Difficulty: Moderate-Strenuous

Leader: Avery Love, BLM

Friday, July 27

Contact: BLM King Range office, 707-986-5400 or email info@lostcoast.org

Beauty of the Lost Coast: Needle Rock to Bear Harbor Hike

Difficulty: Rigorous

Sinkyone Wilderness State Park

Leaders: Eric Shafer, John & Susie Jennings, Marisa Formosa

Sunday, July 29

Contact: Anna at SFI: 986-1087 ext. 9# or email Anna@sanctuaryforest.org

From the Forest to the River: A Hike for Kids Ages 3-6*

Difficulty: Easy Walk, Child Friendly, Wet

Mattole Headwaters

Leaders: Eric Shafer, Victoria Shafer

Saturday, August 11

*Age recommendation open to interpretation by parent. Parent or guardian must attend.

Contact: Anna at SFI: 986-1087 ext. 9# or email Anna@sanctuaryforest.org

Forestry Practices Hike

Difficulty: Rigorous

Humboldt Redwood Co. Land & Freshwater Farms Reserve

Leaders: Mike Jani, Ben Hawk, Sal Chinnici

Saturday, August 18

Contact: Anna at SFI: 986-1087 ext. 9# or email Anna@sanctuaryforest.org

Big Red: Ancient Redwood Hike

Difficulty: Rigorous

Ancestor Grove

Leaders: Richard Gienger, Stuart Moskowitz

Saturday, September 8

Contact: Anna at SFI: 986-1087 ext. 9# or email Anna@sanctuaryforest.org

Restoration Forestry Hike

Difficulty: Moderate

Lost River

Leaders: Matt Cocking, Galen Doherty, Tim Metz, Campbell Thompson

Sunday, September 30

Contact: Anna at SFI: 986-1087 ext. 9# or email Anna@sanctuaryforest.org



Above: Jesse Irwin of BLM leads a hike to the Punta Gorda elephant seal colony in February of 2018, when participants had to detour around an adult elephant seal resting on the trail. Photograph by Flora Brain.

Elephant Seal Ecology Hike

Difficulty: Moderate

Lost Coast: Windy Point to Punta Gorda Lighthouse

Leader: Jesse Irwin, BLM

Date TBD in February 2019

Contact: Flora at MRC: 629-3514

Wildlife Tracking Hike

Difficulty: Easy

Mattole Beach and Estuary

Leader: Kim Cabrera

Date TBD in Spring 2019

Contact: Flora at MRC: 629-3514

Bird Identification Hike

Difficulty: Easy

Mattole Beach and Estuary

Leader: TBD

Date TBD in Spring 2019

Contact: Flora at MRC: 629-3514

Lost Coast Ecology Hike

Difficulty: Moderate

Mattole Beach Trailhead

Leader: TDB

Date TBD in Spring 2019

Contact: Flora at MRC: 629-3514

You can learn more about the King Range and the King Range Alliance by visiting our website: www.kingrangealliance.org.

