



Friends of the Mark West Watershed

2010 NEWSLETTER

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We are a watershed community dedicated to preserving, protecting, and restoring the Mark West Creek and its watershed as a natural and community resource.

Hands-On Stewardship, Mountain Lions & Citizen Science

By Harriet Buckwalter, FMWW Co-Chair

Friends of the Mark West Watershed is growing in a new direction. What does this mean for you? It means more opportunities to get engaged in local stewardship projects; more chances to learn about good stewardship practices on your own land; options for participating in citizen science; and chances to work cooperatively with other environmental agencies and watershed landowners.

At our June retreat, the consensus of our group was that we want to move towards more hands-on stewardship projects that make a positive difference in our watershed. The Cresta revegetation project is a perfect opportunity to further these goals. We will be working with the Sotoyome Resource Conservation District, the Sonoma County Agricultural Preserve and Open Space District, and the FARMS environmental education program to, among other things, plant native species along the section of Mark West Creek that runs through the Cresta property. **This will help create more canopy cover for the creek, better protecting the Steelhead and Coho Salmon who (we hope) will come up here to spawn.** Please see the enclosed flyer for more information on this project.

We also hope to create some educational opportunities for the watershed community in 2011. Some proposed ideas include talks/presentations on **rainwater storage, native plant identification, and Citizen Science:** participating in observation and data gathering (like bird counts and hydrological information) to learn more about our watershed. More definitively, we're scheduling a presentation on a mountain lion research project that is coming to the North Bay, and possibly to our watershed.

The group also decided to continue our current direction of working cooperatively with local landowners and residents. If an individual comes to FMWW with a concern about something that a landowner is doing on

her/his own property, we may try and communicate with that landowner and offer suggestions in terms of good stewardship practices, but we will **not** engage in direct confrontation with the landowner. We instead have chosen to work on changing the county, state, or federal regulations and policies that affect the preservation of our watershed. To that end, we decided to donate \$1,000 to the legal team that is opposing the County's Grading Ordinance. We believe the current ordinance does not have strong enough language when it comes to the regulation of grading for agricultural purposes.

We believe that the best way for us to protect and preserve this precious watershed is to **build positive relationships with landowners**, offer advice and training on best practices, and create stewardship opportunities that allow individuals to engage in projects that directly benefit our watershed. We've got lots of great ideas, but **we can always use more people** to help us implement these ideas, as well as to generate new ideas. Please come join us at a general meeting, participate in a stewardship project, or attend one of our upcoming events.

To be alerted about upcoming stewardship projects, the mountain lion research project and other talks/presentations (including Citizen Science), visit www.markwestwatershed.org or, better yet, sign up for our email listserv by emailing hbuck@sonic.net.

Where Does My FMWW Donation Go?

Great question; see the address side of this mailer. Generally, most donations go towards FMWW's communications—mailers, website and email listservs—about stewardship and educational events and efforts, like our Road/Creek Clean-Up and Hike & Hoot. Those events have their own costs. Non-recurring expenses include the carefully deliberated (for 3 months!) \$1000 donation to the current legal challenge to the county's Grading Ordinance. Got an opinion? Talk to us at our next meeting!

The First Mayacamas Forum

by Ray Krauss

Pepperwood held its first ever Mayacamas Form earlier this Fall. The opening topic was **habitat connectivity within our local mountain range**. The quarterly forum, held at the preserve's Dwight Center, provided an opportunity to meet with neighbors and to share recent findings from conservation scientists and planners working in the central Mayacamas Range (including the upper Mark West Watershed). Tom Robinson of the Sonoma County Agriculture Protection and Open Space District and Dr. Adina Merenlender of UC Berkeley presented on the science of habitat connectivity and the corridor mapping work that they have been conducting in the Mayacamas.

The gathering underscores the importance of creating human networks that act individually and collaboratively to conserve the Mayacamas range and its rich and diverse watersheds. We are most fortunate to share this landscape with the Pepperwood Preserve and its many partners, and to have the Dwight Center as a regional "hub," stimulating conservation science and stewardship collaboration in the Mark West Watershed and beyond. Visit www.pepperwoodpreserve.org for more info.

Local History Gathered

By Linda Sartor

Lee McCarthy-Smith, Ray Krauss, and I interviewed Caroll Bessire on July 24, 2010. Here is a piece of her story as I understood it:

Caroll's grandparents were Mart Tarwater and Clara Finley. Caroll's grandmother's family (the Finleys) arrived in Sonoma County in 1852 on a wagon train. Clara was born the first year after the family arrived. She grew up in west Sonoma County and her first teaching job was at Bodega Ranch on Joy Road. The benches where the children sat were made from prune boxes with planks suspended across them. Later, Clara taught school on Calistoga Rd. She boarded with the Tarwater family and that is how she met Mart.

Mart was a friend of **Jack London's**. He mortgaged his place on Franz Valley Road in order to go to Alaska with Jack. Up until then, he had delivered the mail. When he left to move to Alaska, Caroll's Aunt Flo took over the job of delivering the mail, driving a buggy at age 16.

Martin Tarwater (son of Mart) was Caroll's father. He bought property on St. Helena Rd. in 1910. Caroll was born in 1916 in Santa Rosa. During the days when their house was being built, Caroll remembers sleeping

outside and counting the stars as they appeared.

Her first school was Pine Mountain School and it was located at the end of Tarwater Rd. Her mother taught there and the kids walked down to attend. There were 12-15 students. This school closed when Caroll was in fifth grade. Then she went to Alpine School. Caroll remembers a big bell on the top of the roof of Pine Mountain School. Eventually the school burned down and Caroll wonders what became of the bell.

Martin sold fruit--cherries, apricots, and prunes. He also cut and sold firewood. And he took care of the road from Hwy. 12 to the Napa County Line. He shoveled the slides and kept the ditches clear. He got paid \$5 a day plus \$1 a day for each of the 4 horses, so it came to \$9 a day total. Martin never learned to drive and had nothing to do with a tractor. He only used horses for all the work he did.

Caroll's family made their own cider and her brothers made root beer. Her dad would haul 300 lbs. of ice up with his wagon. He'd cover it with sawdust and it would last a long time. They made ice cream. During prune-picking time, the kids would argue over who got to get away from prune picking to make the ice cream.

They had to go almost to Calistoga Rd. to get their mail. There were only about 6 mailboxes there then. That was all the residences on St Helena Rd at that time. Caroll remembers riding horseback to get the mail. She and her brother, Glen would walk up the creek to see if there were any salmon running and if so, her father would go catch some for dinner.

There were two Tarwater ranches. The house that is still there and deserted belonged to Frances (Martin's 2nd oldest brother). Then Martin's family house was about ½ mi. down the road. That house burned down when Caroll was in high school. Some of the fruit trees are still there.

LandPaths & Rancho Mark West

FMWW wholeheartedly supports LandPaths's campaign to purchase a remainder interest in the 122-acre Doerksen property within the Mark West Watershed. We are encouraged by their long-term intentions to steward Rancho Mark West as a natural landscape with elements of working land (barn, pastures). And also as a community resource, providing a fantastic site for educational visits, hikes and other similar events. We look forward to partnering with them in the future.

Lessons from Lichen

by Penny Sirota, Science Maven

This time of year, the wind-stripped oaks glow from a distance with a ghostly grey-green color. Take a closer look and you'll see that every limb, branch and twig is covered with a riot of different lichens. Lichens are a fascinating community of organisms that have a story to tell us about our watershed.

Lesson #1- Cultivate a working relationship with your neighbor. Lichens are an ingenious mixture of three completely different kinds of organisms working in close association with each other: fungi, algae and bacteria. It is this collaboration that allows lichen to be so mysterious and marvelous.

Perhaps lichen is really fungus that has discovered a form of agriculture.

Fungi provide the basic structure and ability to retain moisture. Within this structure, algae perform their photosynthetic miracle transforming sunlight into chemical energy that feeds the fungi and algae. There is evidence that some of this energy is also delivered to the host tree through tiny fungal filaments into the tree bark.

Lesson #2: Have some mysterious tricks up your sleeve. What about the bacteria that are also a part of this collaboration? The blue-green algae or Cyanobacteria are weird and wonderful newcomers to our understanding of lichen. Some Cyanobacteria can thrive in conditions outside the tolerance of any other life form: extreme heat, pressure, and acidity are fine for these extremophiles. If we find life elsewhere in our solar system, we expect it will be some relative of these amazing organisms. Cyanobacteria are chemical energy magicians. Some of these bacteria are able to transform energy into food utilizing sulphur rather than carbon. This is an entirely different chemical pathway to sustain life. What are they doing in our neighborhood lichen? We don't know for sure!

Lesson #3- Be of use! Research has found that lichen help the trees in which they grow. For example, the lovely lace lichens (*Ramalina menziesii*) act as dust and nutrient filters throughout the dry months. The lacy fibers collect a dry deposition of nitrogen rich organic bits and pieces and mineral rich dust. The rains turn this collection into a nutrient-rich slurry that is delivered right to the feeding roots of the host tree. Some of the leaf-like lichens are important nitrogen fixators for forest systems, pulling nitrogen from the air and "fixing" it into a usable form for plants. All lichen blown from tree branches offer nitrogen-rich food to soil bacteria and other soil dwellers.

50% of all lichens have antibiotic properties. They were used extensively by native cultures for medicines and dyes and were a part of the trading economy in California.

Over 50 species of birds incorporate lichens into their nests. Deer have a specialized digestive enzyme, lichenase, which allows them to benefit from a lichen snack.

Lesson #4: Lichens as Bioindicators: Ecologists use the presence and variety of lichen species to evaluate forest health and ecosystem function. These species can tell us how our forests are responding to local disturbances, pressures and global climate change. Lichens such as the Old Man's Beard that act as air filters can only grow in areas free from smog. As such, their presence is a sign of air quality.

Lesson #5: To know a lichen is to love a lichen. Sonoma County has 16 to 25 different species of Lichen. All lichens can be classified into three groups:

- Crustose: flattened against limbs and rock surfaces
- Fruticose: highly branched structures
- Foliose: leaf-like folds

They are fun to discover! Grab your partner, your kids, or your neighbors and go on a Lichen Safari — right outside your door. Note where they grow...and where they don't! What species of trees host which lichens? What types of lichen are most common? Which are rare? Sampling technique: Use a 3 foot long string to draw a circular boundary. Count and classify all the different kinds of lichen within this area. Repeat this numerous times in various places on your property. Map your findings with a key. Classify your lichens in a photo catalog and/or small samplings pressed or placed in shadow box displays.

Take a life lesson from a lichen:

What can we learn about living in close association with neighbors in this small, special watershed? Certainly we each offer a unique constellation of talents and know-how that can enrich our community as a whole. How do we work to cultivate tolerance for differences? How do we cook and serve up a rich "slurry" of our own that will make our little ecosystem more stable and life-enhancing?

Share your finding with us! To find out more about lichens visit: 1) www.fs.fed.us/pnw, 2) NPR Science NOW – lichens, video pick of the week, 3) A CALS mini guide to some common California. Or pick up "Lichen," by Janet Doell.



Friends of the Mark West Watershed
 6985 St. Helena Rd.
 Santa Rosa, CA 95404
 www.markwestwatershed.org
 Tel: 707-538-5307
Email Listserv: hbuck@sonic.net

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Cresta Riparian Revegetation, (aka, Planting Natives For Fish)

FMWW is in charge of coordinating volunteers from our community to help with this project. Please be sure to look over the enclosed flyer with information about the project. **We'll need volunteers to help on the project start date of February 3rd, 2011.**

More importantly, we'll be looking for people to help with the long-term maintenance of the new vegetation planted in February. We expect to need 4-6 people about every two weeks to come out and monitor progress. You can sign up for one or two individual dates, or for weekly or monthly dates – whatever works for your schedule. Contact Harriet (538-5307 or hbuck@sonic.net) or Greg (318-5863 or gdamron@pepperwoodpreserve.org) to sign up.

2010 FMWW Expenses	
Overhead (e.g., \$240/yr web hosting/email listservs, office supplies, etc.)	\$295.87
Fundraising (i.e., Spring Dance)	89.37
Mailer: Hike & Hoot/Road Clean-Up/Events Update	479.32
Hike & Hoot Event expenses	77.63
Educational Event (Fire Safe Sonoma: Defensible Space seminar)	20.00
Road Clean-Up	126.46
Donation to Other Stewardship Efforts (i.e., challenge to County's Grading Ordinance)	1,000.00
Newsletter printing & mailing (estimate for this newsletter)	700.00
2010 Expenses TOTAL	\$2,788.65
2010 FMWW Donations	
Spring Dance & Newsletter Donations	\$2,470.75
Hike & Hoot (raffle & donations)	437.00
2010 Donations TOTAL	\$2,907.75
2010 Surplus	\$119.10



JOIN US!

Friends of the Mark West Watershed is an all-volunteer organization striving to protect a very sensitive and ecologically important resource.

Your donation pays for basic costs, like our website, email list serves and this newsletter. It also pays for ongoing programs, including our annual springtime events: the Creek & Road Clean-Up and the environmental/educational social aptly titled "Hike & Hoot."

Our monthly meetings are typically the third Thursday of each month and are held at Monan's Rill. For additional information, including upcoming meeting agendas, visit www.markwestwatershed.org.

Friends of the Mark West Watershed is fiscally sponsored by the World Stewardship Institute (www.ecostewards.org), a 501(c)(3) non-profit organization. WSI's mission is to cultivate environmental stewardship within individuals and organizations. Your FMWW contribution is tax-deductible to the extent allowed by law. WSI tax ID: 77-0422218. Please note: FMWW doesn't share your information with anyone.