



Walama Restoration Project

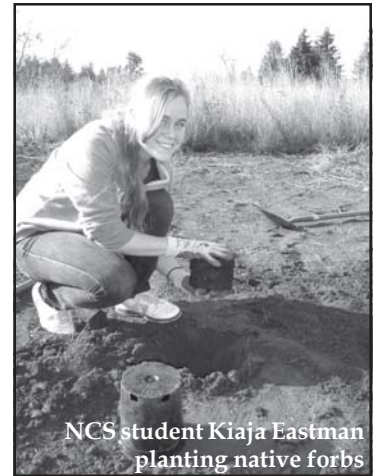
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Explosion of Plants at the Butterfly Meadow

In early November, Network Charter School students joined forces with WRP once again to tackle an enormous task—to plant more than 1,000 native wildflowers and grasses in the butterfly meadow. The students worked diligently, using dibble sticks, shovels, and small hand tools to plant species such as large leaf avens, Cusicks checkermallow, and cinquefoil. **In addition to the plants we grew from our own seed collecting during the summer, the City of Eugene donated hundreds of plants to the project, and we ended the day with more than 1,500 plants in the ground!** It was a long afternoon, but well worth it!

The Whilamut Natural Area Butterfly Meadow is continuing to expand within the grassy field adjacent to the Willamette River. **Thanks to support from the City of Eugene, the Network Charter School, the WNA Citizen Planning Committee, and Erin Lamb from Nearby Nature, WRP is able to continue adding a diverse assortment of plants that will eventually encourage and provide adequate resources for native pollinators.** WRP has expanded the meadow by approximately 20,000 square feet this year. Plans for the following year include installing an interpretive trail with plant identification stations.

Join us next spring for monthly Saturday work parties at the butterfly meadow. For more information on our volunteer opportunities, contact WRP at 484-3939 or at info@walamarestoration.org.



NCS student Kiaja Eastman planting native forbs

Restoration Continues with Volunteers at Maurie Jacobs Park



What once was a sea of 12-foot tall blackberries is finally transforming into a diverse riparian landscape. **Black cottonwoods that were planted in 2002 are now towering more than 30 feet tall. Willow stakes collected and placed by volunteers are now wide shrubs dotting the riverside.** Stewardship is finally paying off along the Willamette River, and WRP is grateful for all of those helping hands.

A dozen volunteers braved the cold to the work with WRP in Maurie Jacob's Park, WRP's very first stewardship site in Eugene. This was the first work party in a monthly series. (WRP's last work party of the year). **Many folks came from the surrounding neighborhood and were excited to be a part of this restoration project along the banks of the Willamette River.** WRP volunteers planted over two dozen native trees and shrubs, removed blackberries and broadcast native seeds. This riparian restoration project is ongoing.

Come out and join us next time, the third Saturday of the month January 17th, February 21st, March 21st 9:30-12:30. Snacks, gloves and raingear always provided! A big thank you to all of our volunteers!



Our Mission

Walama Restoration Project is a non-profit organization dedicated to environmental stewardship and biological diversity through education and habitat restoration.



WRP's Stewardship Site at Maurie Jacobs Park

~NEWS FROM THE FIELD~

It is WRP's 7th year in the field, and we continue our mission to educate the local community on our restoration work. **We appreciate our strong partnerships with the City of Eugene, the Coast Fork Willamette Watershed Council, the USDA Forest Service, the US Army Corps of Engineers, the Nature Conservancy, and others to implement on-the-ground habitat enhancement in wetlands, forestlands, prairie, and riverbanks throughout Lane County.**

In spring 2008, crew members took to the wetlands of West Eugene for the 5th consecutive year of prairie restoration. **With determination and an extensive knowledge of these imperiled plant communities, WRP sifted through more than 200 acres of wet prairie habitat for invasive plants.** WRP worked with the City of Eugene and the Nature Conservancy to improve habitat for endangered species such as the Fenders Blue Butterfly, and its host plant, the Kincaids lupine. We are beginning to see improvement over the years, and look forward to a time when the native plant communities preside over remnant noxious weeds.



WRP crew removing ivy in Hendricks Park.

During the summer, crews headed up river to work with the Mckenzie Ranger District on improving meadow and streamside ecosystems. **We worked in sensitive areas in the Horse Creek Watershed and targeted invasives such as Canada thistle and false brome grass.** We also continued a two-year knapweed control project in Strube Flats by removing shade cloth and seeding the area with native grasses and forbs.

WRP worked with the US Army Corps of Engineers this year to monitor populations of quickly spreading false brome grass surrounding Fall Creek Reservoir. These monitoring projects will assist in the planning of false brome removal projects to come.

We are gearing up for a winter of ivy removal in Eugene's city parks. **Be sure to check out the forest floor next spring in Hendricks Park and at Skinners Butte.** You'll find an array of native plants whose seed banks were once smothered by English ivy, and are now beginning to emerge....

WRP Works to Control False Brome Populations in Alton Baker Park

WRP is collaborating with the City of Eugene to combat false brome populations in Alton Baker Park and the Whilamut Natural Area, thanks to a grant from the Oregon Watershed Enhancement Board. **False brome (*Brachypodium sylvaticum*) is an invasive grass that has recently become an increasing problem in the Willamette Valley. It has been known to severely impact native ecosystems in the Willamette Basin, particularly along the main stem of the Willamette River.** It can alter riparian vegetation, including reducing native herbaceous plant diversity, inhibiting tree seedling establishment as well as losing the long-term materials that provide habitat structure for aquatic life and terrestrial species. **WRP will manually remove false brome throughout the year, and replace the infested areas with self-sustaining native plants.** Look for our crews near the Autzen footbridge in March!

Walterville Students Take Charge in Prairie Restoration

By Liza Kachko

The Walterville Seed Banking Project is underway. As the new Education and Volunteer Coordinator I am excited to jump on board. This project focuses on engaging local youth and upland prairie restoration and instilling a sense of stewardship. **The 6th, 7th and 8th**



graders from Sherrie Warthen's class at Walterville K-8 School are engaging in hands-on science projects; learning about seed propagation, native plants and upland prairie restoration.

This fall the students worked cleaning and preparing seed to be propagated in their school garden. This winter the students will construct a hoop house and plant the native seeds they have been preparing. **As part of the Seed Banking Project students will continue to learn about ecology, the watershed they live in, and restoration of prairie ecosystem.** The plants grown out by Mrs. Warthen's class will be planted at the EWEB demonstration garden, just off Camp Creek Road adjacent to the EWEB hydroelectric facility. WRP would like to thank Tulsie Wallace and the Jackson Family Foundation for helping initiate and implement this project for Walterville students!



Students prepare seeds with coconut fiber for cold stratification

Planting Natives Near the Pacific Crest Trail

WRP brought Network Charter School students up to the Three Sisters Wilderness for the third time to restore a degraded campsite near Obsidian Falls. **With the help of our trusted horsepacker, Phil King, we planted more than 300 plants grown from cuttings. Species included dwarf brambleberry, partridgefoot berry, and gray's lovenge.** Despite the rainy weather, the view was still spectacular, and the plants enjoyed the soak as they settled into the ground. Species planted from last year, especially lupines, were filling the in the campsite, and signs were erected to encourage passers-by to not disturb the area.



Seedlings are placed in the campsite by WRP and Network Charter School students

WRP wishes to thank the McKenzie Ranger District, the Mountaineers Foundation, and the Mazamas Foundation for supporting this project! We will continue to collect cuttings in fall 2009.



Students test water samples with CGHS Oceanography Instructor Eric Cullander

Coast Fork STREAM Program Continues in Cottage Grove

The Coast Fork STREAM Program is underway this year! **We are bringing LCC and Cottage Grove High School students to the Coast Fork Willamette River to study watershed ecology, water quality, and stream health.** WRP has received continued funding from Juan Young Trust and the Shepherd Family Foundation to support this year's education program. **We also recently received funding from the Gray Family Fund of the Oregon Community Foundation to establish a selected team of students from Al Kennedy Alternative High School and Cottage Grove High**

School to conduct EPA approved water quality monitoring along the Willamette River and its tributaries in Cottage Grove. The monitoring will contribute to a regional monitoring program focusing on water quality in three major watersheds in the Upper Willamette River Basin. Additional STREAM projects include restoring a reach of the Coast Fork Willamette River, and hosting a spring watershed event for 7th graders from Lincoln Middle School. **We would like to thank the Coast Fork Willamette Watershed Council and the WELL Project of Springfield School District for being outstanding partners!**

The Unique and Ancient Life of a Sword Fern

Written by *Howie Bonnett*

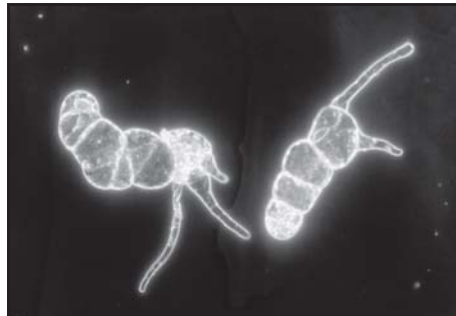
A few years ago the City of Eugene adopted a plan to manage the natural areas of Hendricks Park, which were overrun with ivy, choking out the native vegetation under the trees, and growing up the tree trunks. **The plan calls for restoring the native vegetation by removing ivy and other non-native species. Much of the natural area has been cleared, primarily by Walama Restoration Project crews and park volunteers.** The result has been spectacular and is apparent by noting the difference between the native forest on the uphill side and the ivy-infested forest on the downhill side of Fairmount Blvd. as it passes through the Park.



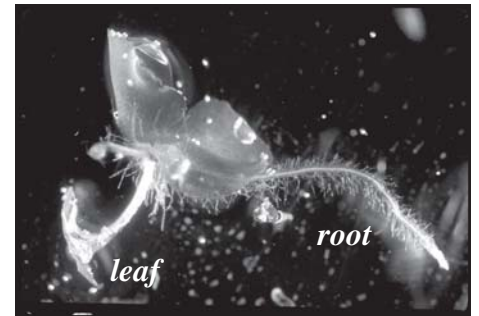
Ivy forms a dense layer of leaves over the ground, which absorbs all the light and prevents other plants from growing under it. The ivy prevents sword fern plants, such as shown in the illustration, from producing new plants. Sword ferns are well adapted to grow under the Douglas Fir trees in the park. **The fern's incredibly tough, fibrous root system helps stabilize the soil; its canopy and past seasons' dead leaves catch rain drops and tree drips to prevent them from washing away soil.** The slow decomposition of leaves contributes organic material to the soil. Individual plants grow for many years. One rarely sees a dead plant in the forest. Sword ferns in my yard have existed, seemingly little changed, for the 40 years I have lived here.



A



B



C

A. The orange-brown spots on the underside of the leaf are composed of clusters of structures which use an elegant mechanism to cast single cells away from the plant, to be carried on wind currents a short distance away, where individual cells settle on the ground and begin to grow. These cells are microscopic.

B. A picture of two plants at an early stage of growth, taken with a microscope, shows about a half-dozen cells in each plant. These plants require light and moisture to grow into mature, small, flat plants about one-quarter of an inch in size.

C. The plant continues to grow, if conditions are suitable, until it produces eggs and motile sperm. The sperm need moist conditions, so that there is a film of water in which the sperm can swim to the egg. The fertilized egg begins to grow into a new, adult, sword fern plant. This picture shows a small, flat plant with a new sword fern plant, which grew from the fertilized egg. The new sword fern plant has produced its first root and leaves. It will take years to produce plants of the size, which dot the understory of the Hendricks Park natural areas.

Why can't these ferns reproduce when surrounded by ivy? To answer this question requires an understanding of the reproductive process of sword ferns. Ferns don't produce flowers. They don't produce seeds, either. Ferns evolved about 350 million years ago. No plants growing on earth 350 million years ago produced seeds. **The method of reproduction typical of sword ferns begins with the structures on the underside of mature ferns leaves, illustrated in the picture of the underside of a portion of leaf.** You, too, can see them if you look at the underside of a fern leaf in Hendricks Park.

When the forest floor is choked with ivy, there is no light for this small, flat plant to grow, and therefore the large sword fern plants cannot reproduce. **When the ivy is removed, moss grows, creating a moist habitat, with sufficient light to allow a few of the cells cast away from the underside of sword fern leaves to grow into these small, flat plants.**

Think of a mature fern plant as a computer, which produces millions of individual print-outs (the single cells cast out), each with all of the instructions to make a new computer. The parts to make the new computer are available elsewhere (where the single cell lands), and, using the print-out information, a new computer is available to use only where the print-out landed.

Howie Bonnett was a Professor of Biology for 30 years, specializing in plant development, molecular biology, and physiology. He currently serves as a member of Eugene's Sustainability Commission, and as WRP's Vice President.

Staff Spotlight

Liza Kachko, Education and Outreach Coordinator

Liza Kachko is WRP's newest staff member. She is an Americorps intern serving with the Northwest Service Academy, and is already coordinating more than three programs for WRP in Eugene and Walterville. Liza moved from San Francisco last spring to pursue further study in botany and herbal medicine at the Colombine School of Botanical Studies. Before moving to Eugene, Liza was busy supporting grassroots organizing in New Orleans, teaching kids about gardening, growing native plants, and exploring natural areas in the Bay Area. Coming from a city, Liza likes finding nature in every place and helping people foster a connection with their environment. When not at work, she spends a lot of time knitting bonnets. Check out her handcrafted bonnets at www.bonnetsnotbombs.etsy.com.



Liza (R) and NCS students

Join the Backyard Seed Project!! WRP's New Program to Promote Native Plants Everywhere...

We are looking for households in Eugene to devote a minimum of 3 square feet in their yard for planting native seeds. The seeds are collected by Walama in the summer, and donated to each household, along with detailed descriptions of the plants, instructions, and a care guide.

The seeds will be sown in January, and grown to full maturity, meaning, until they produce seeds. The seeds will then be collected by you in the summer, with the help of Walama staff. In the following fall, Network Charter School students and Walama will clean the seeds and sow them into flats at our native plant nursery or directly sow them into the ground at the Whilamut Natural Area Butterfly Meadow.

What Will You Receive In Return For Growing Seeds?

- ❖ A brochure on the project providing detailed information on the project, and an in-depth care guide with year-round support and postcard updates from Walama staff botanists.
- ❖ A unique opportunity to witness and experience the full growth cycle of native wildflowers in your own backyard.
- ❖ The chance to take part in the Whilamut Natural Area Butterfly Meadow Restoration Project.
- ❖ Helping create wildlife habitat!

To participate, contact Liza Kachko at liza@walamarestoration.org or at 484-3939.
Deadline is January 2nd.

Upcoming Work Parties

Mark Your Calendars!!
Join WRP at Maurie Jacobs Park the
3rd Saturday of Every Month
beginning in January.

We will be removing blackberries, planting native shrubs, mulching, and sowing native grass seeds. We need as many volunteers as possible to continue our efforts along the river!

Come Join Us on January 17th, February 21st,
and March 21st from 9:30-12:30.

To find us, the site is located along the river, next to the Greenway Bike Bridge, across from the Valley River Center, on the south bank bike path. By car, driving north on River Road, turn right onto Fir Ln, and park in the parking lot at the end of the street. Walk towards the river. Visit our website at www.walamarestoration.org for a map of the park.

Raingear, gloves, tools, and refreshments provided. Contact Liza Kachko for more information at 484-3939.

WRP would like to thank photographer Naomi Levit, for taking outstanding photos for us. You can view her work at www.naomilevitphotos.com. We also thank Wandering Goat, Humble Bagel, the Coast Fork Willamette Watershed Council, and Emerald Valley Kitchen for their donations.



Walama Restoration Project

PO Box 894
Eugene, OR 97440

Community Supported Rehabilitation and Native Re-vegetation of Our Watersheds

Walama Restoration Project relies on community support to continue facilitating our educational programs. If you would like to become involved by volunteering at a work party or by making a tax-deductible contribution, please fill out this form and send to:

Walama Restoration Project
PO Box 894
Eugene, OR 97440

Yes! I would like to be a supporter!

- Limited income \$15
- Individual \$35
- Family \$50
- Sustaining Member \$100
- Sponsor \$500
- Other amount \$_____

Give a Gift Membership
The recipient will receive a card recognizing your gift, and a subscription to WRP newsletters for a year. A one year Gift Membership is \$30, but you can always donate in someone's honor for any amount.

***You can also donate on the web at www.walamarestoration.org**

Yes! I want to volunteer!

name _____

email _____

phone _____

interests _____



Students Aerie Terhaar-Howland and Sierra Gault on the Pacific Crest Trail after a hard days work

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