



Greenlines

A publication of the
Environmental Education Outreach Program

Winter 2008/2009

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EEO Happenings



The Environmental Education Outreach Program has had a busy Summer/Fall 2008. I have recently updated my teacher list serve and am adding lots of content to the new Columbia Springs- Environmental Education Outreach web pages. I hope that you will find lots of great information on upcoming teacher workshop, community events and educational resources. Be patient and check back frequently as more information will be loaded in the coming weeks. You can visit the EEO page at www.columbiasprings.org/eoo. Don't forget to pass along this information to your fellow teachers to spread the word—Thanks!

Nearly 130 teachers participated in nine teacher workshops since August. Below are some photos of the participants, are you in a photo or perhaps you recognize a colleague?



Making Clocks from reclaimed materials during the 4 R's workshop (Nov '08)



Cathy Wright brings a "friend" to show at Birds Go to School" (Oct '08)

Teacher Resources

Great Books:

- The Earth Speaks by Steve Van Matre
- A Sand County Almanac by Aldo Leopold
- Hoot by Carl Hiassen
- The Curious Naturalist published by National Geographic

Great Websites:

- www.kids.nationalgeographic.com
- www.kids.discovery.com
- www.epa.gov/climatechange.com
- <http://www.fs.fed.us/r6/columbia/>

Watershed of Words (WoW) Contest

The Clark County Clean Water Program is sponsoring a creative writing and art contest for Clark County students in kindergarten through 12th grade. Students' poetry and prose will be published in a soft-bound booklet used to raise awareness in the community about the importance of protecting our water resources. Our kids care about clean streams and both concern and fascination shine through in their writing. For more information please check out this link: <http://www.co.clark.wa.us/water-resources/documents/WOW/2009WOWinvitation.pdf>

Leopold Education Project

The Southwest Washington Chapter of Pheasants Forever is bringing, the first ever to Washington, Leopold Education Project (LEP) Facilitators training in nearby Ariel, WA. This training will take place at the Anderson Lodge Retreat Center over the course of three days, January 30 to February 1, 2009.

LEP is a curriculum that is designed around the essays and writings of Aldo Leopold. Lessons are adaptable for formal or non-formal instruction for students of all ages. For more information go to <http://www.columbiasprings.org/eo/events.html> and download LAP Training.

Opportunities for Teachers from the Water Resources Education Center

1. **Healthy Water, Healthy People Teacher Workshop** on February 5, 2009 Time: 8:30 – 3 pm
To register contact Bev at 360.487.7114 or bev.walker@ci.vancouver.wa.us, Cost is \$5 per teacher
6 Clock Hours & Substitute Reimbursement

Healthy Water, Healthy People activity and curriculum guide is filled with hands-on or field activities for students about watersheds and water quality topics. This workshop has an accompanying Testing Kit Manual which includes information about a variety of water test parameters. This will be a fun interactive workshop.

2. **River Camp** on August 10-14, 2009 Time: 9-3:30
To register contact Bev at 360.487.7114 or bev.walker@ci.vancouver.wa.us, Cost is \$25.00
Min 8 max 25 & Up to 30 Clock Hours

River Camp is a weeklong workshop that complements FOSS and STC kits with activities from Project Learning Tree, Project WET and Project WILD Aquatic Activity and Curriculum guides. Participants travel to four different locations: the Water Resources Education Center, a tour of the gorge from Women's Forum to Multnomah Falls, Carson National Fish Hatchery and Bonneville Lock and Dam. The days are filled with fun activities and resources.

News & Announcement From Our Partners

1. Come and learn as a class with the StreamTeam! We provide hands-on learning coupled with meaningful and fun environmental restoration activities in our community. Students are able to experience activities that show them how nature works while improving our local environment. The majority of our students are in middle school and above but we welcome groups of all ages. We cover topics such as: water cycle, plant anatomy, erosion, water quality, ecosystem science, human interaction with our environment, native plant restoration and so on. Spots are limited so contact Lisa Beranek at (360) 992-8585 or StreamTeam@clarkpud.com for more information!

2. The Naturally Beautiful Backyards Program at Columbia Springs invites Clark County community members to apply for a free volunteer training which starts in January. Volunteers will learn about gardening and landscaping approaches that promote health, water quality, and fish and wildlife. In return for the training, volunteers contribute 30 hours over the course of the year sharing that knowledge with others at community events.

Naturally Beautiful Backyards volunteer training sessions will take place on Thursday evenings, January 22 through March 26, 6 to 9 p.m. at Clark County's 78th St. Operations Center. Space is limited and pre-registration is required. To download a volunteer training application visit www.columbiasprings.org/nbb or more information about the volunteer training and the Naturally Beautiful Backyards Program at Columbia Springs call 360-891-1992, email nbb@columbiasprings.org

3. The Master Composter/Recycler Program at Columbia Springs in Clark County invites the community to make a difference and help promote a healthy and sustainable future by becoming a Master Composter/Recycler. Applications are being taken for a free volunteer training in composting, recycling and other sustainability techniques. Training will start in late January and will held Thursday evenings, January 29 through April 2, 6:00 to 8:30 p.m. at Fire Station 83, 213 NE 120th in Vancouver, WA.

Space is limited and pre-registration is required. To download a volunteer training application visit www.columbiasprings.org/mcr, for more information about the upcoming volunteer training and the Master Composter Recycler Program at Columbia Springs call 360-882-4567, email mcr@columbiasprings.org

4. On-Site Environmental Education at Columbia Springs- Do you know that Columbia Springs offers free on-site environmental education? Come tour the fish hatchery, explore landform processes in the stream table, investigate macroinvertebrates, take a hike and much more. Programs are available for pre-school through college classes for all school groups. Curriculum can be adjusted to meet the needs of the students and teachers. Spring dates are filling quickly! Visit the website, www.columbiasprings.org, or contact Coral Conant for more information: cconant@columbiasprings.org 360-882-6610.

5. Earth Day Celebration- Saturday, April 18, 2009

Join the StreamTeam and celebrate Earth Day! There will be a number of FREE, fun family friendly activities including a live wildlife show, environmental fair, and a native tree planting to save salmon. Registration for the tree planting is required to participate but the rest of the activities are open to your schedule! For more information, please contact Lisa Beranek at (360) 992-8585 or visit www.StreamTeam.net.

6. Columbia Springs Fishing Festival, May 2, 2009

Please check the website at www.columbiasprings.org for more information regarding this event; you can also contact Alishia Topper (atopper@columbiasprings.org) for more information.

Upcoming Fall/Winter Teacher Workshops

On the following page is the much anticipated list of Winter/Spring workshops for 2009. Please register early as some workshops have limited space. Clock hours are available to those who request them. I will have information regarding price of workshops and availability of substitute reimbursement funds in mid January.

Please print out the flyer or better yet, forward this newsletter to your colleagues so that they may also attend.



ENVIRONMENTAL EDUCATION OUTREACH PROGRAM

2009 TEACHER WORKSHOPS/EVENTS

FEBRUARY TO JUNE

Science on a Shoestring: Water

Need some great science demonstrations and have no funds? This workshop will highlight density, absorption, water tension and other physical properties of water in a fun and fast paced evening. Lots of ideas and lessons on how to teach and engage your students about a substance that we often take for granted will be shared.

Columbia Springs- Swift Classroom

February 24, 2009

4-8 pm

4 Clock Hours

All About Weather

Climate change, Gorge winds, the Trash Patch of the Pacific Ocean all are weather related. This workshop will have something for teachers of all ages. Kids love to learn about weather as much as people love to discuss the weather come learn about weather patterns and interesting phenomena that you can incorporate and share with your students.

TBA

March 11, 2009

9:00 to 3:30 pm

6 Clock Hours

Project Learning Tree: K-8

Charting Diversity. Birds and Worms. Pollution Search. These are some of the 96 hands-on interdisciplinary activities in PLT's PreK-8 guide. The PreK-8 Guide covers such topics as water and air quality, ecology, urban environments, and recycling. Take home the curricula and lots of ideas and tools to incorporate this nationally recognized curriculum into your classroom.

TBA

March 24, 2009

9:00 to 3:30 pm

6 Clock Hours

Urban Wildlife & Habitats

Several teachers requested a workshop about urban critters and wildlife and so, here is a tailor-made workshop for them and for you. Life cycles, biology, adaptations and more about common wildlife that we share our neighborhoods, yards and sometimes our homes will be discussed and perhaps you will pick up some tips for inviting some wildlife to your yard while discouraging others away. We will focus on habitats in a larger sense too, exploring biomes from all over the world, threats to some of those places from pollution and degradation and how to teach your students about conservation and preservation.

TBA

April 8, 2009

9 to 3:30

6 Clock Hours

Native Plants

Drought resistant, drought tolerant, invasive, exotic, and ornamental are terms likely overheard in your local nursery. If you have questions about what to plant, when to plant and how to care for those native species then attend this workshop where experts will be on hand to answer many of your questions and talk to you about how to talk about this subject with your students.

TBA

April 30, 2009

4 to 7:00

3 Clock Hours

Missoula Floods & Other Geologic Feature and Tour

This workshop will be a road trip through the gorge with several stops to learn about our environment, soils, geology and more. More details will be coming soon and space will be very limited.

TBA

All about Organics: Pesticide Free, Beneficial Bugs and More

Going organic is much more than chic or trendy; it's healthier for the soil, plants and perhaps us too. We will discuss all things (maybe not ALL) and also talk about the downside to organics as well. Come learn some ways to reduce the toxics in your garden, diet and environment.

TBA

May 12, 2009

9:00 to 3:30 pm

6 Clock Hours

Project W.E.T. (Water Education for Teachers)

Teachers have you ever needed that perfect activity to complement a unit on water? Project W.E.T. is a time tested and assessed curriculum with over 100 water related activities that are inter-disciplinary and appropriate for all ages. Many activities have been correlated to EALRs. All of the activities are fun and educational and most do not require excessive or expensive equipment.

TBA

June 10, 2009

9:00 to 3:30 pm

6 Clock Hours

NOTES: Substitute Reimbursements may be available for teachers who request funds prior to the workshop, please inquire about funds at the time of registration. Workshop space is somewhat limited, so please register as soon as possible.

Educational Trunks Available for Loan

NEW!

A new trunk all about Worms and Vermicomposting will be available in January. This trunk was debuted, in part, at the Save Organic Scraps & Vermicomposting workshop in November. Lots of support materials are included that will assist teachers who have worm bins in their classrooms. In addition, there are two plush "worms" available for loan out to help teachers teach about anatomy of worms without actually harming any living creatures. Please

The EEO program has available several education trunks that are filled with lessons, games, manipulatives, books and more. The trunks may be checked out by any teacher/educator for a period of up to one month. Teachers are responsible for transporting and making sure all items are returned. Below is a list of resource trunks available, please call or email Amy to reserved the trunk of your choice. Reservations are first come, first serve.

TRUNKS:

- Salmon
- Audubon Birds Go To School
- Lewis & Clark: Adventures in History
- Bats! (this trunk is located at the US Fish & Wildlife office)
- Vermicomposting (Available in January!)

2009 Columbia River Watershed Festival

The Columbia River Watershed Festival will take place in mid- September 2009. The committee has selected Vancouver Lake as the site in 2009 and we will invite schools primarily from Vancouver & Evergreen School District. A major change in this year's festival will be that only 4th grade students will be invited.

Applications for the 2009 festival will be sent out to selected schools in March/April. Please be on the lookout for the application packets, the limited number of spaces fill quickly.

The Columbia River Watershed festival is sponsored by Clark County, City of Vancouver, Clark Public Utilities, US Fish & Wildlife Service and Columbia Springs.

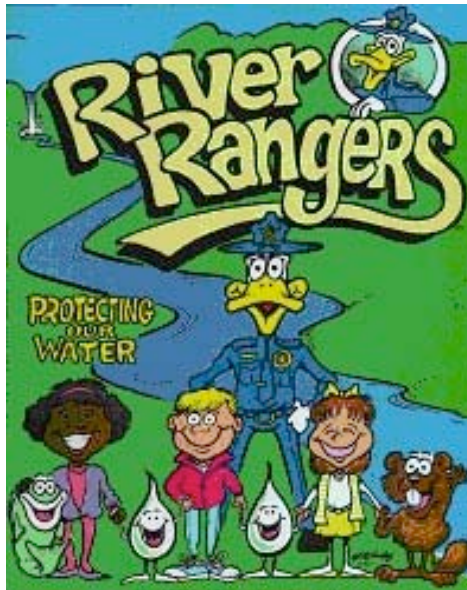


Students engaged in making tracks.

A presentation about our watersheds

Classroom Presentations

River Rangers is an award winning water quality education program that has been used successfully in Clark County schools since 1992. Trained volunteers and professionals provide interactive classroom presentations using 18 large colorful posters:



The water cycle
How we use water
Water conservation
Surface water runoff problems
Groundwater
Wastewater treatment
Household hazardous products (use, storage, disposal)

A take-home activity booklet and stickers for each student are included as well as a teacher information and resource packet.

Group Size	1-2 classrooms per presentation
Duration	Approximately 45 minutes, but presentations can be modified to accommodate 30-60 minute time periods.
Cost	Free
Sponsored by	Clark County Clean Water Program and the Columbia Springs Environmental Education Outreach Program

This classroom presentation is designed to support **Washington State Essential Learning Requirements** and can help students meet the following benchmarks:

Communication

The student will use language to interact effectively and responsibly with others. (3.1)

Science

The student will recognize the components, structure, and organization of systems and the interconnections within and among them. (1.2)

The student will understand how interactions within and among systems cause changes in matter and energy. (1.3)

Geography

The student will identify and examine people's interaction with and impact on the environment. (3.1)

Community Calendar

If you want more information about any of the events posted, please contact the person or website listed with the event.

<u>DATE</u>	<u>EVENT</u>	<u>CONTACT</u>	<u>WEBSITE/EMAIL</u>
<u>January</u>			
1 st	New Year's Day—Holiday, Office Closed		
19 th	Martin Luther King, Jr Day—Holiday, Office Closed		
22 nd	Naturally Beautiful Backyards Volunteer Training Begins	Kenneth O'Brien	kobrien@columbiasprings.org
29 th	Master Composter/Recycler Volunteer Training	Jo Ann Dolan	jdolan@columbiasprings.org
<u>February</u>			
5 th	Healthy Water/Healthy People (Teacher Workshop)	Bev Walker	bev.walker@ci.vancouver.wa.us
17 th	Salmon Summit II	Tracy Sand	tsand@columbiasprings.org
18 th	Student Environment Leadership Conference (SELF)	Sally Fisher	sally.fisher@clark.wa.gov
24 th	Science on a Shoestring: Water (Teacher Workshop)	Amy Carpenter	acarpenter@columbiasprings.org
<u>March</u>			
12 th	All About Weather (Teacher Workshop)	Amy Carpenter	acarpenter@columbiasprings.org
19-21 st	Washington Science Teachers Association Conference		www.wsta.net
TBA	Project Learning Tree: K-8 (Teacher Workshop)	Amy Carpenter	acarpenter@columbiasprings.org
<u>April</u>			
8 th	Urban Wildlife & Habitats (Teacher Workshop)	Amy Carpenter	acarpenter@columbiasprings.org
11 th	Critter Count	Cory Samia	cory.samia@ci.vancouver.wa.us
18 th	Earth Day Celebration @ Marshall Center		
22 nd	Earth Day		
25-26 th	Clark County Home & Garden Idea Fair		
30 th	Native Plants (Teacher Workshop)	Amy Carpenter	acarpenter@columbiasprings.org
<u>May</u>			
TBA	Missoula Floods & Other Geologic Features & Tour	Amy Carpenter	acarpenter@columbiasprings.org
12 th	All About Organics (Teacher Workshop)	Amy Carpenter	acarpenter@columbiasprings.org
25 th	Memorial Day- Holiday, Office Closed		
<u>June</u>			
10 th	Project Water Education for Teachers (W.E.T.)	Amy Carpenter	acarpenter@columbiasprings.org

****NOTE:** The listing below does not represent every event that is scheduled, but rather those events that were passed along to me for posting, if you would like your event posted (July – December 2009 events) please send me your information.