

# Horizons

SUMMER 2004



BENTON SOIL AND WATER CONSERVATION DISTRICT—SERVING BENTON COUNTY SINCE 1956



Trevor Osborn earned his Eagle Scout Award by leading a soil erosion repair project.

## Erosion Repair Worthy of Eagle Scout Award



**Before:** Soil erosion along the ditch had occurred after several large storms.

The work of Trevor Osborn demonstrates how soil and water conservation practices can reap benefits on various levels. Trevor earned his Eagle Scout award by working on an eroded roadside ditch. Trevor, a member of Boy Scout Troop 322 in the Calapooia District, is the son of Glen and Paula Osborn of North Albany. Trevor graduated from West Albany High School in January of 2004. He is pursuing a career in computer programming.

The Eagle Scout award is the highest honor awarded to a Boy Scout. To achieve the rank of Eagle Scout, Trevor gained approval and help from his scout leader, Mark Melbye. The scout troop committee, and the Scout District Advancement Chair also approved his project. The purpose of the Eagle Scout award is to develop leader-



**After:** Graded slope and erosion control fabric permit grass to grow and protect the site from further erosion.

ship skills by implementing a project that also benefits the community. Trevor planned the project, obtained the necessary permits, staked out the repair area, and supervised the work. He received a donation of grass seed from Barenbrug Seeds in Tangent. An OSU Extension Service Research grant provided the funding for the excavation work and erosion control fabric. Donna Schmitz, Benton SWCD's Watershed Technical Specialist, assisted Trevor with permit requirements and suggestions on erosion control fabric.

The newly-completed urban grass waterway serves the community as a good example of proper maintenance and functioning of roadside ditches. For more information about ditch repair, contact the Benton SWCD office: 753-7208, or [donna-schmitz@or.nacdn.net](mailto:donna-schmitz@or.nacdn.net).

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## *The Chair's Perspective*

*Tom Bedell*

I trust this summer season works in your favor. Although the crop year precipitation rests at nearly the long term average, this year's early warm spring, which slid back to cool, brought plant development ahead of schedule. As always, weather is just one of the vagaries agriculturists must contend with each year.

The Small Grants program, which provides funding for watershed improvement projects of \$10,000 or less, is nearly half-way through the biennium. I encourage you to take this opportunity to develop restoration/rehabilitation projects on your land and apply for funding to help pay for some of the costs. You can get some project ideas from Page 5 of this newsletter. Since it takes some lead-time, from a few weeks to several months to plan a project, please consider contacting our office to talk with the staff about starting an application. For these types of projects, one needs a management plan and a monitoring plan. They need not be sophisticated, but the evaluation group does need to know what you want to do and who will be responsible for doing it. Our staff will help you develop these plans.

It is not too early to be thinking about what native tree species you plan to plant in 2005. It is important to match the tree species to site characteristics. If you need a large number of trees, the District can order your trees at the same time we are putting in our order for our February 2005 tree sale. It's best to act early and give us a call before specialty trees supplies are depleted. For general orders, we distribute our plant sale order form in our winter Horizons issue. The short blurb below offers summer site preparation activities and maintenance tips that will improve the survival of your native plantings.

Recently the Department of Environmental Quality (DEQ) designated a part of Benton County along the Willamette River as a groundwater management area. This is the area from the Lane County line and east of Highway 99W north to North Albany and east of Highway 20. The DEQ is working with local jurisdictions and residents to form varied groups to write an action plan for the area. If you live in the area and have an interest in assisting in this effort, please visit this web site for more information <http://groundwater.oregonstate.edu/willamette>

Lastly, you will notice a short article on BSWCD Director Elections on page 3 of this newsletter. We invite any eligible voter to consider running for a director position. Having vibrant and committed directors ensures a viable and progressive district. This is your chance to become part of our conservation team.



## 2004 Conservation Poster Contest Winners

**M**t. View Elementary students from Mrs. DeMeo's first grade class created winning posters for the K - 1st grade level. First prize went to Michaela Corbitt, second to Paige Reynolds, and third to Kayla Watts. At Jefferson Elementary, Mrs. Pullam's students took the 2nd -3rd grade artistic honors; Mariah Faretto, Audrey Wheatcroft, and Finn Giuidotti, placed first through third, respectively. From Monroe Grade School, Mrs. Goracke's students won prizes in the 7<sup>th</sup> - 9<sup>th</sup> grade category. Two 7<sup>th</sup> graders, Sarah Bennett and Kim Thompson, won first and second place. Charlie Lee, an eighth grader, scored the third place position. First place posters will compete at the state and possibly national level.

The winning posters will be on display locally throughout the summer. See them in The Corvallis-Benton County Public Library during the month of July, and on the 3rd floor of the Ag and Life Sciences Building, OSU campus, in August.

## Summer Native Tree and Shrub Care

Summer is a great time to prepare your site for next winter's native tree and shrub plantings. Chemically or mechanically remove other vegetation, like grasses, that compete for moisture and hide munching rodents. Mulch each plant location with a thick layer of compost to suppress weed regrowth. One proven restoration practice is to till the planting area and

spray 3-foot herbicide circles at each plant location. For herbicide recommendations, call OSU Extension, 766-6750, or the OSU Department of Forestry, 929-3266.

Preparing your site early has several advantages; you'll know how many and what species of plants to order for next year's planting, it will be easier to meet

the April 1<sup>st</sup> planting date (no fooling), and the survival rate of your plantings will likely improve.

**It is very important** to water last winter's plantings at least twice each month throughout the summer. Some transplants may look dead due to shock. Give them a full year and watch for new growth at the base of the plant.

# Conservation Calendar

## July

July 6

**Luckiamute/Ash Creek/American Bottom Watersheds Assessment unveiling** 7 PM, at the Monmouth Public Library located at 168 S. Ecols Street. For more information, see the article on page 6 of this issue or contact Eve Montanaro by phone, 503-838-8804, or email, [lwc@wou.edu](mailto:lwc@wou.edu).

July 16 - 18

**da Vinci Days** For more information visit <http://www.davinci-days.org>

## August

August 3 - 7

**Benton County Fair** - Something to Crow About! For more information visit [www.bentoncountyfair.com](http://www.bentoncountyfair.com)

August 2- 6

**Environmental Science Day Camp** sponsored by Avery House Nature Center and Benton County for kids ages 12-15 who are interested in the environment and endangered species. For more information contact Avery House Nature Center at 758-6198 or at [ahnc@peak.org](mailto:ahnc@peak.org) or [www.peak.org/~ecenter](http://www.peak.org/~ecenter).

August 7

**Salmon Watch Volunteer Training - 8:15 to 12:15 at the Delbert Hunter Arboretum, Dallas, OR.** Adult volunteers are invited to attend a free training workshop to learn more about water quality, aquatic insects, riparian zones, and working with kids. They will share their knowledge with students during fall weekday field trips scheduled for September and November. For more information contact [tom.tattam@ortrout.org](mailto:tom.tattam@ortrout.org). Additional training sessions will be held in the Portland area, August 21 and September 11, and in Eugene on August 14.

August 17 - 19

**Wetland Management Workshop focused on moist soil management techniques**, held in Vancouver WA - conducted by University of Missouri's Gaylord Memorial Laboratory and sponsored by WDFW in cooperation with US Fish and Wildlife Service, and Ducks Unlimited. For more information contact Don Kraege, Washington Department of Fish and Wildlife, phone 1.360.902.2522.

August 26 - 28

**2004 Farwest Show** - The Oregon Association of Nurseries presents North America's to nursery and greenhouse industry trade show. Registration is required and free through July 31. Exhibits combined with pay-to-participate seminars, tours, and a Tree Symposium make this an educational event. For more information visit [www.farwestshow.com](http://www.farwestshow.com) or call 1.800.342.6401.

## September

September 18

**Kids Day for Conservation** - join over 30 local businesses, non-profits and agencies in the promotion of conservation to community youth. Activities link resource awareness with urban, agricultural, and forest practices. For more information contact Dick Powell at 929-2477 or [dick@starkerforests.com](mailto:dick@starkerforests.com).

September 25 - 26

**Corvallis Fall Festival** For more information visit <http://corvallisfallfestival.com/cff/>

## Benton SWCD Director Elections

The terms of four BSWCD Board of Director positions expire on December 31, 2004. All positions are four-year terms starting January 1, 2005. Directors are elected by the public during the November 2, 2004 general election.

Two zone positions will be open. One is in Zone 2, which extends from Corvallis north to the Polk County line and east to the Willamette River including North Albany. The second in

Zone 3, which is the area from Corvallis and Philomath south to Greenberry Road and the summit of the Coast Range east to the Willamette River.

Eligibility for Zone positions includes:

- must be a registered voter.
- must own or manage 10 or more acres in the district and be involved in the active management of the property and must reside within the boundaries of the district.
- must either reside within the zone or own or manage 10 or more acres within

the zone and be involved in the active management of the property.

Two At Large positions will be open. At Large directors must reside within the district and be registered voters.

*Individuals interested in running for these positions should contact the Benton SWCD office, 753-7208, to verify their eligibility. The District office can provide petitions, the declaration of candidacy forms, and guide you in the necessary procedures.*

## A NICKEL FOR CONSERVATION

The Benton SWCD will be seeking a tax rate of 5 cents per \$1000 assessed value this November.

The purpose of the tax levy is to provide funding for long-term support of conservation work in Benton County.

A citizen's group has been established to support this ballot measure.

To help or ask questions contact:  
Cliff Hall at 929-4876 or P. O. Box 490, Philomath, OR 97370.

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## Water Wisely; Be a Smart Irrigator

*by Mark Taratoot, BSWCD Associate Director*

**Summer is finally here!** Not only does this mean time for picnics, summer vacations, and hanging your raincoat away in the closet, it also means that you may be irrigating crops, lawns, gardens, or landscapes. All plants need water, and sometimes it is difficult to know just how much water they might need. It is important to give plants as much as they need but no more. Not only does excessive irrigation waste water, it can actually damage your plants. Overwatering can even contribute to groundwater pollution if fertilizers, pesticides, or other soil amendments are washed away from the root zone by excessive watering.

Whether you are irrigating hundreds of acres or simply watering a small urban property, finding out a plant's water requirement is critical. You already know that too little water can cause plant stress and lead to reduced growth & yields. So, how do you find out how much water you need? Read on!

Our winter rains supply more water than plants can use. Some excess water fills up the pore space in the soil - this is where water is stored for use by plants. Enough rain falls during the winter for soil to get saturated. Gravity goes to work on this water, and some drains out of the soil. Once all this easily-drained water has left the root zone, there is still quite a bit of water held in storage, and we can think of this wet soil as "full," even though some water has left by gravity drainage.



There are essentially two ways water can leave the soil once it's been initially drained. The first is evaporation; when liquid water turns to a vapor and leaves the soil, destined to return to the sky and fall again as rain or snow. The second process, called transpiration, is similar. The primary difference is that transpiration is the process of a plant drinking water from the soil and releasing water vapor to the atmosphere. The two processes in combination are called evapotranspiration, or ET for short. Since ET is the only process of water removal from soil, we will know how much water to put back into the soil if we can figure out the ET level. *Continued page 7*

**OWEB Small Grants:** The **Oregon Watershed Enhancement Board (OWEB)** provides funds to help residents address the restoration priorities, specific to our area, that are shown in the boxes below. These priorities were based on decisions by small grant teams of local conservation partners.

Improve fish passage and connectivity among aquatic habitats.

Protect, restore, improve and maintain functionality of the watersheds: **capturing** precipitation where it falls, **storing** it in the soil profile and **beneficially releasing** it into creeks, streams, rivers, wetlands, marshes or into the deeper water table.

Minimize soil erosion and water runoff carrying sediments, nutrients and pollutants.

Improve water quality, including temperature, to provide beneficial aquatic habitat conditions.

Protect, maintain and/or improve high quality habitats, e.g. wetlands and swales, riverine woody vegetation, oak savanna, etc.

Manage riparian areas to provide streambank stability, shading, and filtration of runoff.

**Is your site suitable for a small grant project?**

Restoration activities fall into three land use categories: agricultural, forestry, and residential. Identify the category that best describes your site and read project examples below. Now, imagine a small grant project that will help you address the conservation priorities. The BSWCD staff is available to help you design your project, apply for grant money, and network with conservation partners. For a successful and rewarding project, call us at (541)753-7208.

**Agricultural**

- Rehabilitation/restoration along streams and water bodies, including vegetation establishment and management for streambank stabilization and other riparian area enhancements. May include protection from grazing, fencing, off-stream livestock water and weed control.
- Conservation practices that reduce nutrients, pollutants, and sediments from entering bodies of water.
- Pasture and cropland management to retain and improve infiltration of precipitation.
- Wildlife habitat enhancement, except for nutrient management, wildlife water facilities, and food crops.
- Restoration of wetland hydrology and vegetation.
- Eliminate/minimize barriers to fish passage.

**Forestry**

- Rehabilitation/restoration along water bodies, including vegetation establishment and management for streambank stabilization and other riparian area enhancements. May include weed control.
- Improvements in native fish habitat and passage.
- Wildlife habitat enhancement, except for nutrient management, wildlife water facilities, and food crops.
- Management practices that prevent sediment, pesticides and other pollutants from entering water bodies.
- Forest improvement for watershed health.

**Residential**

*Urban and rural*

- Rehabilitation/restoration along streams and water bodies, including vegetation establishment and management for streambank stabilization and other riparian area enhancements. May include protection from grazing, fencing, off-stream livestock water and weed control.
- Off-stream livestock watering and pasture management in order to reduce surface runoff of excess water and nutrients.
- Conservation practices that reduce nutrient, pesticides and sediments from entering water bodies, whether from agricultural fields, roads, farmsteads, yards, etc.
- Management of manure and other nutrients.
- Restore wetland hydrology and vegetation
- Eliminate/minimize barriers to fish passage.

Read more about the OWEB small grant program at <http://www.oweb.state.or.us/SmallGrant/smallgrant.shtml>

*Report...***Kings Valley Restoration Tour**

Twenty-five conservation enthusiasts joined us for the Kings Valley Restoration Tour on May 22, 2004. Tour evaluations indicated that the tour was enjoyable and informative. Evaluations also provided feedback that will influence our plans for future workshops. The table below shows the percent interest in workshop topics based on tour evaluation responses:

<b>Workshop topic</b>	<b>Percent interest</b>
Native plants	100
Water conservation	75
Weed control	83
Conservation planning	75
Forestry	50
Irrigation management	33
Master watershed steward program	33
Pasture management	17

To express your interest in future workshops and influence our services, please contact the BSWCD Education & Outreach Director by calling the BSWCD office, 753-7208, or emailing [teresa-matteson@or.nacdn.org](mailto:teresa-matteson@or.nacdn.org). Let us know how we can better serve your needs.

**Fish Passage Volunteers On the Move**

The Benton County Fish Passage Improvement Program field season is underway. SWCD volunteers are hitting the streams with levels, rods, tape measures and hip waders to measure culverts and inventory bridges for the program. There are over 8000 stream crossings in the county and we have a big job ahead of us to categorize each of these crossings as a fish passage barrier or as a "fish friendly" crossing. Our focus will be on private lands within Benton County.

If you have a culvert, dam or bridge crossing one of Benton County's beautiful streams, please contact us for a free culvert survey. The information will be used in a Benton SWCD database to prioritize fish passage projects. Funding may be available to remove fish passage barriers on private lands. No regulatory actions will take place and the effort is strictly voluntary.

For more information please contact Stacy Carpenter at the conservation district or check online at [www.peak.org/~bentoncd](http://www.peak.org/~bentoncd) and look under Fish Passage.

**Watershed Assessment Unveiled**

The Luckiamute-Ash Creek-American Bottom watersheds assessment will be made public July 6 at a "roll-out" celebration hosted by the Luckiamute Watershed Council. The event is at 7 p.m. at the Monmouth Public Library located at 168 S. Ecols Street. The event is open to the public.

Ralph Garono, of Earth Design Consultants, will lead a presentation that describes the contents of the assessment, how it might be used, and what still remains to be studied in the watershed. A CD with assessment maps, charts, and historical descriptions will be available to those interested in learning more about the watersheds. The Luckiamute council will use the assessment to help guide its decisions about improvement efforts.

*For more information about the assessment or watershed council's activities, call Eve Montanaro, at 503-838-8804, or e-mail [lwc@wou.edu](mailto:lwc@wou.edu). The council is seeking volunteers and council members to fill agriculture, industry and resident posts. The council meets on the second Thursday of every month at Monmouth's Volunteer Hall.*

***Benton SWCD is currently recruiting a  
Volunteer Coordinator.  
This is a volunteer position.***

*Do you have 8 to 12 hours a week available to volunteer your energy, enthusiasm, people skills, professionalism, and organization skills?*

We recognize that one of our greatest strengths as a conservation district is our community and the people who volunteer their time and their passion to the mission of the Benton SWCD. Our goals are to grow our volunteer base, to keep our volunteers happy and to make sure each person's volunteer experience is high quality. To accomplish these goals we have initiated a search for an energetic and outgoing person who will organize, recruit, manage and care for our volunteers.

The Benton SWCD can provide you with a unique opportunity to work for an active local conservation organization with strong ties to the land, water and community of Benton County. Gain valuable experience working with our volunteers on meaningful projects such as habitat restoration, Making Ripples: community building for water quality, Corvallis Outdoor School, Annual Native Shrub and Tree sale, the Fish Passage program, and working in the SWCD office.

To apply please send a cover letter and resume to Benton SWCD at Pioneer Plaza, 305 SW C Avenue, Suite 2, Corvallis, OR 97333.

**Enjoy life - volunteer with BSWCD!!!**

**Water Wisely; Be a Smart Irrigator** *continued from page 4*

Evapotranspiration is driven by a few factors. Temperature obviously is important. Everyone has observed a puddle drying faster when it’s warm than when it’s cold. Wind is also important – breezes can speed both evaporation and transpiration. Relative humidity is a fourth factor. Finally, since different plants have different water requirements, ET calculations will be different depending on what plants you are irrigating.



Unless you want to operate a weather station and run a bunch of calculations every day, how can ET help you figure out how much to irrigate? The US Bureau of Reclamation has a great service called AGRIMET that does just this. While it’s best to have a weather station on-site to get the best ET data, the Corvallis AGRIMET site is close enough that it provides good data for us to use, at least on the Willamette Valley floor. You can visit the AGRIMET website at <http://www.usbr.gov/pn/agrimet/> click on Crop Water Use and find the station CRVO. To determine crop water requirement, be sure to subtract any rainfall from the ET. Note also that plants need only about 75%-80% of ET, so please adjust the AGRIMET data. Finally, don’t forget that since ET is calculated from plants in the full sun, plants in the shade will need significantly less water than ET calculations suggest.

If you are watering a lawn, vegetable garden, flowers, or shrubs, there’s an even easier way to find out how much water your landscape needs. The City of Corvallis Public Works Department operates a water conservation hotline. Simply call 766-6733 and then dial “1.” You will hear a recorded announcement of how much water your lawn or garden needs for the week.

**Here are a few more important watering guidelines from Mark:**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Give your irrigation system a tune-up. Remove soil or vegetation that block or partially block rotors or spray heads.</li> <li>• Find out how much water your system delivers. Put straight-sided cans (cat food, tuna, etc), on the landscape to measure the depth of water applied. Use a stopwatch while the system is running. You can then determine the application rate by dividing depth (inches) by time (hours). Combine this data with ET to determine how long to run the system.</li> <li>• Only water after 7:00 pm or before 8:00 am. Watering during these hours will reduce evaporation loss before the water even gets to the soil. Additionally, there is less wind during these hours, too, so the water ends up where you want it rather than blowing all over.</li> </ul> | <ul style="list-style-type: none"> <li>• If you can do so, split up a watering session into two or three shorter sessions. This allows the water you apply to soak into the soil rather than running off.</li> <li>• Water less often, but water deep. Fill the root zone! This can be up to 18-inches or more depending on your lawn or garden. After you get the soil full, don’t water again until ET has removed about half of this water. Deep watering actually can improve the health of your plants by encouraging deep rooting.</li> <li>• If you are only watering turf, consider allowing your lawn to go dormant or partially dormant during the dry summer season. Your lawn will become a golden color, and you won’t have to mow it nearly as often.</li> </ul> |
|--|--|

By following these guidelines, you can keep your crops or landscapes healthy and happy without wasting water or contributing to pollution. Water is not very expensive, but it is critical to all life. If your well spits mud at you one fine summer evening, you’ll agree with Ben Franklin’s wisdom that “Only when the well is dry will we know the worth of water.” Using smart irrigation practices can help keep that well from running dry. And remember, every gallon we don’t pump out of the river is a gallon that the fish get to keep!

*Mark Taratoot is the Water Resources Specialist for the City of Corvallis Public Works Department.*



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## Special Thanks...

☺ to the following businesses for supporting our 2004 poster contest with services and prizes: **The Book Bin, Borders Music, Books & Café, Corvallis-Benton County Public Library, Day Dreamers Bead Shop, First Alternative, Inc., Fred Meyer, Happy Trails, Hollywood Entertainment Corporation, The Old World Deli, OSU Crop and Soil Department, Pegasus Frame Studio, and Trump's Hobbies.**

☺ to **James V. Conklin** for your generous financial contribution to Benton SWCD.

☺ to **Jerry and Kay Mumper** for your generous financial contribution to BSWCD.

## The Benton SWCD mission

is to provide leadership to Benton County residents through education and technical assistance for conservation and responsible use of soil, water and related resources through a balanced, cooperative program that protects, restores, and improves these resources.

### Board of Directors

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Rana Foster  
 Mark Taratoot

### Employees

Jennifer Floro, Office Manager  
 Donna Schmitz, Watershed Technical Specialist  
 Stacy Carpenter, Fish Passage Program Coordinator  
 Teresa Matteson, Education and Outreach Director

*The Benton SWCD is an equal opportunity employer, providing services to the public without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status.*

### Benton SWCD Wish List

- *Education and Outreach Funding*
- *Endowment support*
- *Data entry volunteer* - BSWCD is seeking a volunteer with Excel experience for 2004 tree sale data entry. The work station is available each afternoon, Monday through Friday.

Thank you to those who have donated in the past.  
 Your donations have supported our conservation services for 48 years!