

Spring news from the Conservation District



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District Manager's Message

By Jim Cathcart

It is with great pleasure we bring you the Spring 2017 edition of West Multnomah Soil & Water Conservation District's electronic newsletter. And, aren't we all ready for spring after the second wettest winter in the Portland metro area over the last 75 years? Nature works in cycles and spring is the time for renewal, growth and refreshment. The days are longer, the temperatures warmer and with some hope, the weather less precipitous. Spring also launches the District's Early Detection and Rapid Response (EDRR) control effort against one of our priority invasive plants, garlic mustard.

This edition of the e-newsletter features articles on native plants that support those everso-important pollinators, the importance of getting your soil tested, tips for dealing with storm damaged trees, where to go for information about protecting your home from landslides, how managing your lawn and lawn clippings can prevent the spread of the invasive Japanese beetle pest, and the importance of native plant diversity to removing the amount of carbon dioxide from our atmosphere; the more the better as far as climate change is concerned.

Also, we are excited to introduce to you, Ari DeMarco, who is filling a new position to our staff – Seasonal Conservation Technician. Ari's role is critical to filling the District's capacity to implement our EDRR control efforts in the spring and fall as well as to support our field monitoring data collection work. Monitoring the success and effectiveness of our conservation work in the field is critical to learning the answers to these types of questions: are our native plant hedgerows making a difference in supporting our native bee populations; does riparian restoration work increase shade along our streams and reduce water temperature; what is the composition of shrubs and trees before and after a forest thinning project?

Helping us with our EDRR and field monitoring work are our field interns. Joining us this year are Dylan Carlson, Avery Pheil and Kristina Rissetto. Read about their interests below.

Lastly, mark your calendars for May 16th, and join me and your fellow conservationists for a day-long conference -- *Collaborative Conservation in the Urban Landscape* -- dedicated to learning about the Greater Forest Park Ecosystem. More information is provided below. In the meantime, soak up some sun and get out to enjoy, implement and advocate for conservation!

Storm damage leads to upcoming workshop

By Michael Ahr, Forest Conservationist

The winter in western Oregon brings heavy rainfall and strong winds that can cause damage to your woodland. This year was flat-out brutal at times. Trees fell, culverts overflowed, structures were damaged, and some of our main roads to work or the store were closed for days. Most years, forest damage is minimal, but this year you may be dealing with bigger issues.



Heavy tree damage is evident while driving through the west hills: While driving around, you'll notice that trees along forest edges were impacted this year. It's common to see a tree fall without actually breaking. But this year, we saw trees with their entire root systems torn out of the ground and the root balls rolled over. Usually that only happens with small-to-medium sized trees. I've

been surprised this winter by how many large western redcedar and Douglas-fir have been

knocked down. If you've lost 2 or 3 trees this way, you might decide to just leave them where they are. Downed wood can create great wildlife habitat and these could be your future nurse logs. On the other hand, we've seen some landowners next to recent timber harvests or roadways who've lost dozens of trees. In these areas of high impact, it's important to determine if any additional trees are leaning, indicating their roots have been dislodged. Some of these trees may recover, but many might fall in the next year or two. If the damage is great, you may want to hire a logger to salvage some of the wood from your forest. If the area is not very accessible, you can hire a crew to at least buck up and stack some of the wood. Be careful walking through these patches of forest where you have damage - the trees may still be settling, and in the process of falling, for several more weeks.

The Farm Services Agency would like to identify the number of forestland owners/acres affected by the high winds on April 7th. Emergency Forest Restoration funds may be available for debris removal, replanting, and more. **Please contact Darca Glasgow at** 503-472-1474, ext. 2 to report heavy damage that might be considered for assistance.

On May 17 at 7 pm, we're hosting a workshop at the Skyline Grange with OSU Extension to discuss what to do with these trees, and how to make your forest more resilient in the future. We'll talk about trees in your forest as well as those near your house. An arborist will join us to present some great information. If you have photos you'd like to share at the workshop, send them to Michael Ahr in advance (please limit to 1-2 photos).

Wednesday, May 17th, 7:00 pm, Skyline Grange, 11275 NW Skyline Blvd Speakers: Amy Grotta, OSU Extension Forester Terry Flanagan, Teragan & Associates Michael Ahr, West Multnomah SWCD

Forest Roads: Heavy rain can erode a forest road, making it less useful to you and adding unwanted sediment to local streams. Minimal erosion can be difficult to see, but sometimes heavy flow can occur right down the middle of a road, creating a small gully. If this occurs, you can temporarily dig a small trench, or water bar, that diverts water off the road to the surrounding forest floor where it can be absorbed by soil and vegetation. Contact the District for additional advice on what to do in these areas.

Culverts: Culverts are drainage pipes installed under your forest road where the road crosses streams or drainages. After heavy rain, these can clog with soil, wood, and other debris from upstream. Once clogged, water may flow over the road instead of under it, causing damage to road and sending sediment to our streams. Culverts need annual maintenance, and we encourage you to assess them a few times each winter to make sure they're draining properly. If you stay on top of it, you'll often be able to clear debris with a

shovel or other hand tools and avoid more serious problems.

Minimize Lawn Care and Help Prevent a Major Pest

By Mary Logalbo, Urban Conservationist



Leaving your lawn clippings will save you time and energy while returning valuable nutrients to the soil. According to Scott's Lawn Library, "The most important thing you can do for your lawn is to feed it regularly, and grass clippings contain the same beneficial nitrogen, phosphorus, and potassium nutrients as fertilizer. In fact, lawn clippings can provide as much as one-third of

the annual feeding requirement for your lawn. In addition to recycling nutrients, leaving lawn clippings will cut your mowing time and relieve you of the chores of emptying the grass catcher and hauling bags of clippings out to the curb." It also cuts down on the time and gas our waste haulers use to take waste to yard debris stations! Read more here.

Lawns in western Oregon don't need irrigation to survive, according to Oregon State University's lawn expert, Tom Cook. If you don't mind a brown lawn in late summer and a few more dandelions, most lawns will be green again in the fall when the rain returns. If a green lawn is what you want this summer, consider a strategic watering approach that focuses on specific areas and avoids over-watering. Click here for details.



Aside from saving you time, energy and money and reducing your carbon footprint and water use, you are helping prevent the spread of a major threat found in our District, the Japanese beetle! In 2016, the invasive Japanese beetle (*Popillia japonica*) was found in record numbers in Oregon Department of Agriculture (ODA) traps around NW Thompson and 143rd Avenue. ODA is implementing an area-wide plan to treat this major threat. Grubs like to breed in well-watered lawns and will hitchhike on plant material to other locations, so if

you cut down on watering and leave your lawn clippings, you're helping protect Oregon from a pest that can cause serious damage to nurseries, seedbeds, orchards, field crops, landscape and garden plants! The Japanese beetle is considered the single most important turf grass pest in the United States, so if you love your lawn, please help us keep this infestation contained and controlled!

Do you live within the Japanese beetle control zone? Still need to remove your lawn

clippings? The Oregon Department of Agriculture is establishing a green waste transfer station specific for material originating from the control zone to ensure the material does not transport the beetles or grubs to commercial yard debris stations. Details forthcoming in June 2017.

Protecting your home from landslides

By Carolyn Lindberg, Communications Coordinator

Unless you live in a cave, you've heard about and seen pictures of a number of landslides in the Portland area this winter and early spring. Some of them (notably a couple on the west side of the city) are still causing anxiety on the part of nearby homeowners and city officials tasked with protecting them. So, what causes landslides and how can you protect your family and property?

We don't have to go very far to get answers to our questions. Portland State University's geology department has published a great resource called the *Homeowner's Guide to Landslides: Recognition, Prevention, Control and Mitigation*, compiled by Dr. Scott Burns (the leading local expert on landslides and erosion), Tessa Harden and Carin Andrew. The following are some key points of the publication, which can be viewed in full online.



Landslides are caused when rock, soil and debris are pulled down a slope by gravity - it can happen in an instant or take weeks to occur. The Portland area has a moderate-to-high risk of landslides, which cause everything from property damage to loss of life. Slides occur on a slope when the downward driving force exceeds

the upward resisting force. You get into trouble if:

- Slopes are too steep (more than 10-15 degrees)
- Heavy rainfall or snowmelt occurs
- Water is added from irrigation, downspouts and/or poor stormwater drainage, or broken sewer or water lines
- Extra material is loaded at the top of the slope
- Earthquakes occur

Survey your property for past landslide damage by looking for bumpy ground, curved scarps, and leaning trees with bent lower trunks. If landslides have happened in the past, there's a higher likelihood they'll happen again.

To minimize landslides:

1. Avoid irrigation on slopes

- 2. Check water and sewer lines for breaks
- 3. Avoid removing material from the base of slopes
- 4. Avoid adding excess material at the top of the slope
- 5. Drain runoff away from slopes and into storm drains or natural drainages
- 6. Plant ground cover with deep roots on slopes
- 7. Build retaining walls at the base of the slope

And always consider contacting a certified or licensed engineering geologist if you have specific questions about your home and property!

Connect SW PDX

Nature. Neighbors. Connect.

By Mary Logalbo, Urban Conservationist



Connect SW PDX is a project that links neighbors and partners through a story-telling campaign, on-the-ground restoration, community input meeting, neighborhood liaison training and door-to-door conversations.

There are many exciting ways to "connect" through this project – we welcome you to participate in the following opportunities available on our website.

- Please fill out the online survey & pledge to connect you with available resources and to help us learn how to better serve your community! The survey is currently available in English, Vietnamese, Somali and Arabic coming soon in Laotian.
- Please join us at a Community Celebration on May 31st at Jackson Middle School from 6-8 PM for a FREE dinner and conversation about how interested partners can provide programs that help people, plants wildlife in the West Portland Park Neighborhood. We will share initial findings of our neighborhood listening project and gather more input on what concerns you most and ways that partners can help. Please RSVP here.

• Follow our social media campaign that highlights inspirational stories of environmental stewardship @WMSWCD, #ConnectSWPDX.

Thank you to Metro for sponsoring this project!

Five of the best native plants for pollinators

By Laura Taylor, Conservation Technician & Education Coordinator

Pollinators such as bees, butterflies, moths, hummingbirds, beetles and other insects help make our gardens and natural areas bountiful and beautiful. Bees are especially helpful for pollination since they actively gather pollen to feed their young. In addition to the European honey bee, Oregon is home to at least 500 species of native bees, most of which are gentle solitary ground or wood cavity nesters. The Orchard mason bee is one example of a native species that people are becoming more familiar with. These native bees are four times more attracted to native plants than they are to "introduced" or horticultural plants since they have developed an intimate mutualistic relationship over thousands of years of living together. One of the best things we can do to help support native bees and other pollinators is to provide them with native flowers to forage on throughout the growing season.

Here's a list of a few native wildflower species that are easy to grow in our local climate and produce prolific blooms that pollinators go wild over. They all prefer sun and can tolerate moderate to dry moisture conditions. They are arranged in order of their bloom time from spring to late summer. Planting all of these together will provide beautiful season-long blooms with minimal effort. For more plant recommendations and design ideas, check out our meadowscaping web page and guide.



Stream bank lupine (*Lupinus rivularis*) – Visited by many bees including bumblebees and small leaf cutter bees who climb deep inside the flower. Grows 2 - 3 ft. tall and wide with multiple spires of lightly fragrant purple pea-like flowers that bloom in mid-spring. Does well with a bit more water than the others listed here. Grows as an annual, biennial, or short-lived perennial but readily self-sows. Toxic

to livestock.

Oregon phacelia (*Phacelia nemoralis*) – One of our local bumble bees' absolute favorites! Grows a rosette of silvery-green leaves close to the ground, then puts up a 3-4 ft. tall flowering stalk with fiddlehead spirals of pale cream flowers in late spring to early summer. Can tolerate moderate shade. Perennial.



Meadow checkermallow (Sidalcea campestris) -

Attracts a wide range of pollinators from tiny dark carpenter bees to bumblebees. Grows a rosette of dark green leaves close to the ground then puts up several 4-6 ft. tall wispy flower stalks covered in pale pink flowers in midsummer. Prefers dry conditions and full sun. Perennial.

Yarrow (*Achillea millefolium*) – Supports a wide range of pollinators including many small native bees, hover flies, and other insects. Feathery leaves with 1-2 ft. tall flower stalks topped by masses of small white flowers in mid to late summer. Perennial and will spread.



Fireweed (*Chamerion angustifolium***)** – A favorite of honey bees, but visited by other native bees too. Sends up 5-7 f.t tall stalks in the spring which develop spires of bright pink blooms in late summer. Local legend says that summer has ended when the last fireweed finishes blooming. Perennial and an enthusiastic spreader.

Who's Eggs Are These?

By Mary Logalbo, Urban Conservationist



As I walked with a landowner through their beautiful mixed stand woodland lot overlooking a headwaters section of Abbey Creek, we stopped to investigate a large mysterious egg mass. We stared at it for a while and scratched our heads. It sat on moist soil and organic debris near a cedar stump and looked just like a red-legged frog egg mass. To add to the amphibian excitement the landowner spotted a Pacific giant salamander walking around the property the very next day. After taking a photo of the egg mass and sending it along to state and local wildlife experts, I was still unsure, but discovered the following:

Even though red-legged frogs normally breed in the water, they sometimes
discharge their eggs before they get to water. Also, predators, such as raccoons,
can move eggs.

- The jury is still out on whether the eggs were from red-legged frogs or native salamanders, but both lay their eggs in the water. The size of the egg mass leads us to believe they were red-legged frogs.
- The Pacific giant salamander found onsite was not likely the mother to the eggs we found, however they do, at times, lay their eggs in groups attached to a log or a crack in a rock. Native salamander eggs are not colored. Beware the female will protect its eggs with her sharp teeth!

In the spring, aside from amphibian eggs, so many other eggs and young animals may be found in your natural area ranging from ground nesting birds to ground nesting bees, so minimize disturbance until the young wildlife matures.

Spring Soil Testing

By Scott Gall, Rural Conservationist

It's time to take a test, maybe several. For most gardeners, farmers and plant enthusiasts, spring is a great time to take a soil test. As Oregon comes out of a cold, wet winter, many plant nutrients are at their lowest concentrations. Testing in the spring provides a road map for the rest of the growing season. In addition, fertilizing without a proper soil test can lead to over-application or under-production, or both. For those trying to maximize production, a mid-season and end-of-season test is advised. The mid-season test will indicate if everything is on track and whether additional fertilizer is necessary. The final test can serve as a form of report card – showing what is left after the growing season and what you might want to cut down on next season.



How to properly "take" a soil test: Each soil sample should represent only one soil type or soil condition. So if there is a garden in front of your house and one in back, two separate tests may be needed. If using raised beds, take samples in the beds, not in the areas between them. Farms should take one test per field unless there are obvious

differences within the same field – at which point a test should be taken for each different soil condition.

For each test or sample, remove any vegetation from the area to be tested. If using either a shovel or garden spade cut a 6 inch "V" shaped hole, then cut a thin slice from one of the sides to the bottom of the hole. If using a soil probe (corer or auger) simple remove material from the top 6 inches. These represent one "subsample." For a truly representative test, take 6-8 subsamples for small gardens and 10-20 for larger areas.

Thoroughly mix all the subsamples in a clean bucket. If the bucket has been used to hold

fertilizer or other chemicals, wash it thoroughly before using. Contact a soil testing lab to find out how to prepare and submit the sample. For a list of labs and all things soil, head to our website and if you have any questions, head to our website and for more information contact Scott.

Collaborative Conservation in the Urban Landscape

By Michael Ahr, Forest Conservationist

You are invited to attend a one-day conference focusing on the greater Forest Park ecosystem. This event will highlight the Greater Forest Park Conservation Initiative (GFPCI), a 20-year, collaborative strategy to restore and protect 15,000 acres of public and private land within the greater Forest Park ecosystem.

The conference will be held Tuesday, May 16 from 8 am to 3:30 pm at the World Forestry Center in Portland.

Spearheaded by the Forest Park Conservancy in cooperation with public and nonprofit agencies, the GFPCI addresses the serious threats to the health of this critical ecosystem. Come learn about the ecology of the greater Forest Park ecosystem, collective restoration efforts and how you can get involved. Speakers will share their work on four main topics, including streams and watershed health, wildlife and connectivity, forest health and community engagement.

The conference is open to the public and is wheelchair accessible. Get tickets here.

Working with Wisdom

By Mary Logalbo, Urban Conservationist

"Wisdom of the Elders, Inc. (Wisdom) formed Wisdom Workforce as a social venture to provide a holistic approach to environmental habitat restoration utilizing Native American traditional ecological knowledge (TEK) and conventional science, strengthen Native workers' career engagement, cultural identity, positive health and wellness resiliency, and address Native American disparities. The impact of our work is synergistic in practice, as the greater Portland area acquires innovative advances, our employees experience personal growth (cultural, financial, educational, and professional), Native American disparities are improved, and growth of our firm to expand our influence and share our successes."



Staff at the District began working with Wisdom on a long running restoration effort in lower McCarthy Creek at the Native American Rehabilitation Association Northwest (NARA NW). Through this project, Wisdom staff conducted critical invasive plant removal, installed beaver cages and helped further develop partnerships with NARA NW staff.

More recently, Wisdom and the District planned and co-presented topics and had staff leaders go through the Urban Watershed Mentors program. Wisdom's involvement in this program greatly enriched the subject materials providing new perspectives to how to conduct restoration work and increased knowledge on cultural importance of plants at a project site with an emphasis on edible and medicinal uses. In May, restoration work is scheduled with Wisdom crews in SW Portland around George Himes – a project that's sponsored by Metro.

Increase Carbon Storage with Species Diversity

By Kammy Kern-Korot, Senior Conservationist

Using photosynthesis for energy, plants absorb carbon dioxide and store carbon in their leaves, stems and roots, later transferring it to the soil through decay. Such carbon storage is of particular interest in the face of concerns over climate-warming carbon emissions. This interest led a group of researchers to recently ask if changing the number of plant species in an ecosystem would affect the amount of carbon that the ecosystem stores over time. Based on studies in a Minnesota grassland, they found that it does, and in a positive way.

Each additional plant species in the study area increased overall carbon storage, presumably because new species can fill new niches, yielding more overall plant growth. While increasing species richness is desirable in general, the greatest benefit for carbon storage seems to be from adding diversity to the least diverse areas. Adding just 1 species to a hectare of land is estimated to increase carbon storage by 9.1 metric tons over 50 years; and an increase from five to six plant species stores almost 10 times more carbon than an increase from 15 to 16 species.

It's great to know that in addition to supporting more wildlife, improving soil health and reducing erosion, plant biodiversity also enhances the ecosystem's ability to store carbon, which has climate protection and economic value. (Each metric ton of carbon has a current social cost / value of approximately \$137.) So, whether it's in your forest or garden or along your stream or canal, you now have one more reason to maintain or add a variety

of (native) plants. Read more about the study here.

Welcome to our new staff!

Ari DeMarco, Seasonal Conservation Technician



Ari DeMarco is the Seasonal Conservation Technician. She primarily supports the EDRR invasive weed program by treating plants in the field and providing GIS mapping assistance in the office, but also helps with field monitoring and other District programs.

Ari holds a degree in Biology from Lewis & Clark College and a MS in Sustainable Forestry from

Oregon State University. Her academic work focused on entomology and forest health, while her professional work has mainly involved invasive species.

Before joining WMSWCD, Ari worked at the H. J. Andrews Experimental Forest, staffed a remote research station for The Nature Conservancy, and otherwise sampled the myriad joys of seasonal technician work. In her spare time she enjoys hiking, gardening, and traveling, and she has volunteered as an insect collection curator, as well as for Mt. Pisgah Arboretum and Point Blue Conservation Science.

Dylan Carlson, Field Intern



I was born and raised in Northern Arizona where my interest in conservation began. I began studying forest health at Northern Arizona University and finished my BS in biology with special interest in ecology/botany at Portland State University. I will complete my GIS Certificate from PCC this spring. For the past few years I have worked in the field with a local environmental restoration company and have volunteered at Tryon Creek Natural Area and Portland's Friends of Trees. I am particularly passionate about creating functioning

ecosystems that will someday be able to maintain themselves and support healthy habitats. Invasive plant species are my nemesis and I am always on the lookout for ways to better promote native plant growth.

In my spare time I like hiking, riding my mountain bike, generally being outside, hanging out with my wife and two boys, and making film photographs. I have been slowly transforming my yard into a backyard habitat oasis where native plant and animal species

thrive.

Avery Pheil, Field Intern



I am graduating this month from Scripps College in California, where I studied Biology and spent most of my time outdoors searching for flowering plants, bees, and other small, breathtaking bits of ecology. I'm constantly working to expand my knowledge of the natural world, sustainable agriculture, environmental education, and conservation and restoration biology.

I also enjoy swimming, aerial silks, and freeline skating. I love food, cooking, camping, and reading,

and my one year old niece! I grew up in Salem and am so excited to be returning to the Pacific Northwest, after many school years spent studying and doing field research away from home. I look forward to connecting with many of you during my internship with WMSWCD.

Kristina Risetto, Field Intern



Kristina Risetto will graduate from Portland State University in June, 2017 with a B.S. in Environmental Science and a minor in Geographical Information Systems. She is an avid reader and also enjoys camping and hiking. Her primary interests lie in plant ecology and restoration, both the restoration of ecological communities and of our relationship to the land. Kristina hails from Maryland, although she's lived in St. Augustine, Florida for a few years before moving to Portland in 2010. She loves traveling and spend as much time as possible outdoors.

Kristina has volunteered for environmental organizations such as The Tualatin Riverkeepers, Metro, and American Conservation Experience and looks forward to this opportunity to serve as a Field and GIS Intern. She says, "I think it's important to sustain the world which sustains us, and I'm excited to work in environmental sustainability so we can continue to enjoy clean water, clean air, and diverse habitats."

Calendar

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Tuesday, May 9, Weed Watcher Training, 5:30-7:30, Multnomah Arts Center, Rm. 8
Tuesday, May 16, Collaborative Conservation in the Urban Landscape conference, 8:00

am-3:30 pm, World Forestry Center

Wednesday, May 17, Storm Damage Workshop, 7:00 pm, Skyline Grange **Wednesday, May 24**-Tryon Creek State of the Watershed Event, Tryon Creek Nature Center

July

Sunday, July 30- Willamette River Festival, Cathedral Park

August

Saturday, August 6 – Skyline Ridge Neighbors Summer Gathering, Plumper Pumpkin Patch

Saturday, August 19 – Multnomah Days, Multnomah Village

Happy Spring!

Prepared by Carolyn Myers Lindberg, Communications Coordinator