



Cultivating

HEALTHY FARMS, FORESTS, FOOD,
AND FAMILIES IN POLK COUNTY

NURTURING CONSUMER
CONNECTIONS WITH CSAS | PG. 6

WORKING TOWARDS

••• **a Better Tomorrow!** ←



Keeping Your Crops Comfortable

Energy efficient heating & cooling
with precision temperature control

We have systems for your home or business too!



HOME COMFORT INC
HEATING & AIR CONDITIONING

Keeping Our Customers Comfortable Since 1954

24 Emergency
HOUR Service

1827 S. Main • Dallas

503-623-2341

WWW.HOMECOMFORTINC.COM

CCB# 113253



WHO WE ARE



Oregon State University
Extension Service
Polk County

The Polk County Office of the Oregon State University Extension Service provides research-based educational information and programs in Agriculture, Forestry, 4-H/Youth and Family and Community Development for the citizens of Polk County.

OSU Extension's mission is to convey research-based knowledge in a way that is useful for people to improve their lives, their homes, and their communities.

OFFICE LOCATION & HOURS

289 E Ellendale, Suite 301
Dallas OR 97338 | 503.623.8395
extension.oregonstate.edu/polk

Due to COVID-19, OSU Extension is operating under modified office hours. Please call the office at to hear our current office hours.

STAFF CONTACT INFORMATION

NICOLE ANDERSON | FIELD CROPS

503.434.8912

ALISHA ATHA | OFFICE MANAGER & COUNTY LEADER

971.612.0022

NEIL BELL | COMMUNITY HORTICULTURE

971.612.0026

SUSAN BUSLER | 4-H YOUTH DEVELOPMENT

971.612.0028

AUDREY COMERFORD | AGRITOURISM

503.689.8241

JENIFER CRUICKSHANK | DAIRY

971.600.1222

CARLA CUDMORE | FRONT OFFICE & 4-H SUPPORT

971.612.0024

JAVIER FERNANDEZ-SALVADOR | SMALL FARMS

503.373.3766

EMILY LAMPE | 4-H YOUTH DEVELOPMENT

971.612.0029

MITCH LIES | CULTIVATING EDITOR

mitchlies@comcast.net

CHRISSEY LUCAS | WELL WATER PROGRAM

541.766.3556

RICHARD RIGGS | REGIONAL DIRECTOR

503.269.6389

CHRISTOPHER SCADDEN | SNAP ED

971.612.0030

RACHEL VILLWOCK | FRONT OFFICE & COMM. HORTICULTURE SUPPORT

971.612.0023

BRAD WITHROW-ROBINSON | FORESTRY & NATURAL RESOURCES

541.766.3554

CALENDAR OF EVENTS

JUNE

30 - OSU Ext. - Tree School Online: Managing Root & Butt Rot of Conifers workshop - extension.oregonstate.edu/county/Clackamas/events

30 - OSU Ext. - Tree School Online: See the Forest for the Bees - extension.oregonstate.edu/county/Clackamas/events

JULY

ALL PSWCD MEETINGS VIA ZOOM. CALL 503-623-9680 X110 FOR DETAILS.

1 - PSWCD - Policy Committee Meeting - 1-3 p.m. - Every Wednesday through July

2 - PSWCD - Finance Committee Meeting - 9:00 a.m.

3 - PSWCD & OSU Ext. - Closed for 4th of July

7 - OSU Ext. - Tree School Online: Commercial Truffle Cultivation in Western Oregon - extension.oregonstate.edu/county/Clackamas/events

7 - OSU Ext. - Tree School Online: Goods from the Woods - extension.oregonstate.edu/county/Clackamas/events

8 - PSWCD - Board Meeting - 6:00 p.m.

14 - OSU Ext. - Tree School Online: Intro to Small Woodland Management - extension.oregonstate.edu/county/Clackamas/events

14 - OSU Ext. - Tree School Online: Managing Understory Vegetation - extension.oregonstate.edu/county/Clackamas/events

21 - OSU Ext. - Tree School Online: Pruning Timber - extension.oregonstate.edu/county/Clackamas/events

21 - OSU Ext. - Tree School Online: Restoring Riparian Areas - Beginner - extension.oregonstate.edu/county/Clackamas/events

28 - OSU Ext. - Tree School Online: Red Alder Management - extension.oregonstate.edu/county/Clackamas/events

28 - OSU Ext. - Tree School Online: Words of Wisdom from the Woods Panel - extension.oregonstate.edu/county/Clackamas/events

AUGUST

ALL PSWCD MEETINGS VIA ZOOM. CALL 503-623-9680 X110 FOR DETAILS.

ALL MONTH - PSWCD - On-line Native Plant Sale orders taken - Available in February 2021 - See our website for availability - www.polkswcd.com

6 - PSWCD - Finance Committee Meeting - 9:00 a.m.

12 - PSWCD - Board Meeting - 6 p.m.

SEPTEMBER

ALL PSWCD MEETINGS VIA ZOOM. CALL 503-623-9680 X110 FOR DETAILS.

ALL MONTH - PSWCD - On-line Native Plant Sale orders taken - available in February 2021 - See our website for availability - www.polkswcd.com

3 - PSWCD - Finance Committee Meeting - 9:00 a.m.

7 - PSWCD - Closed for Labor Day

9 - PSWCD - Board Meeting - 6 p.m.

16 - PECAN - Fall Meeting @ OSU Extension Ellendale

OCTOBER

ALL PSWCD MEETINGS VIA ZOOM. CALL 503-623-9680 X110 FOR DETAILS.

1 - PSWCD - Finance Committee Meeting - 9:00 a.m.

12 - PSWCD - Closed for Columbus Day

14 - PSWCD - Board Meeting - 6 p.m.

WHO WE ARE



POLK SOIL AND WATER
CONSERVATION DISTRICT

Nearly 3,000 Soil and Water Conservation Districts (SWCD) across the United States are helping local people conserve land, water, forest, wildlife, and related natural resources. SWCDs are charged with directing programs to protect local renewable natural resources.

Polk SWCD was formed in April 1966, and promotes erosion control, reduction of invasive species, improvements to farms and forests, control of animal waste, as well as improving wildlife habitat and water quality/quantity issues in Polk County. The Polk SWCD is administered by 7 locally elected volunteer directors representing 5 zones and 2 at-large positions within the county. The Polk SWCD is a source of information and education on natural resources.

OFFICE LOCATION & HOURS

580 Main Street, Suite A
Dallas OR 97338 | 503.623.9680
www.polkswcd.com
Mon-Fri 8am-4:30pm

STAFF CONTACT INFORMATION

MARC BELL | SENIOR RESOURCE CONSERVATIONIST

marc.bell@polkswcd.com | Ext. 103

JACKSON MORGAN | FARM SPECIALIST

jackson.morgan@polkswcd.com | Ext. 107

KARIN STUTZMAN | DISTRICT MANAGER

manager@polkswcd.com | Ext. 110

Polk SWCD is an equal opportunity provider and employer and prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. Persons with disabilities who require alternative means for communication of program information should contact the district office at 503.623.9680.

Oregon State University Extension Service prohibits discrimination in all its programs, services, activities, and materials on the basis of race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, familial/parental status, income derived from a public assistance program, political beliefs, genetic information, veteran's status, reprisal or retaliation for prior civil rights activity. (Not all prohibited bases apply to all programs.)

CONTENTS

Nurturing Consumer
Connections with CSAs | 6

CULTIVATING SUSTAINABLE COMMUNITIES

8 | Planting to Attract
Hummingbirds Year-Round

Polk 4-H, Master
Gardener, Agriculture,
Forestry Extension District | 11

CULTIVATING HEALTHY YOUTH & FAMILIES

12 | Watch Out For a New
Pest Targeting Oaks

Frequent Questions about
Wastewater and Septic Systems
and Coronavirus (COVID-19) | 12

13 | Food Preservation
Resources

CULTIVATING PRODUCTIVE FARM & FOREST BUSINESS

Hedgerows For
A Working Farm | 14

16 | Eat and Drink
Locally: Dairy Edition

CULTIVATING NATURAL RESOURCE CONSERVATION

Defensible Space: A
Landowner's Best Bet At
Mitigating Wildfire Damage | 18

20 | Conservation Reserve
Enhancement Program (CREP)

Determining Hay Quality
Using Visual Factors | 22

Published June 24, 2020

Designed and Published by the
Itemizer-Observer

Printed by
Eagle Web Press | Salem, OR

147 SE Court Street | Dallas, OR
503.623.2373
www.polchio.com

Stop by or give us a call to
advertise in the next issue!

CULTIVATING is a quarterly publication of Oregon State University Polk County Extension Service and Polk Soil And Water Conservation District. Included in these pages, readers can find practical information on farm and forest management, on home and lifestyle choices, and on the many programs and services available through the Service and the District.



Nurturing Consumer Connections with CSAs

PHOTO BY BAILEY HEEDICK | UNSPLASH

By Mitch Lies

Cultivating Editor

There were thoughts at one point of majoring in anthropology, but they were quickly dismissed, and Eden Olsen, the 28-year-old sole proprietor of Lucky Crow Farm in Monmouth, today is part of a local food movement sweeping the U.S.

“I realized how much I love working outdoors and gardening,” Olsen said. “And food justice and food sovereignty were my passion, so I decided to study the food system and ended up in agriculture.”

Olsen, who ended up majoring in sustainable agriculture and food policy at Scripps College in Claremont, Calif., today produces several dozen crops on three acres spread out over three sites, including two in Monmouth and one in Salem. She sells direct to customers at two of the sites and at the Corvallis Farmers Market and operates a CSA, or community supported agriculture, that has a waiting list of applicants hoping to join.

In CSAs, customers pay in advance for weekly distributions of boxes of food during the growing season. Data collected by the USDA in 2015 indicated that 7,398 farms in the U.S. sold direct to consumers through

CSAs, accounting for \$226 million of the \$3 billion in direct-to-consumer sales by farms.

Customers of CSAs can enjoy a wide variety of fresh, locally grown produce throughout the growing season. And the systems benefit small farmers by helping cover upfront costs for purchasing seeds and other farm inputs.

“CSAs are revolutionary,” Olsen said. “When people pay those upfront costs for produce, you are able to make those purchases.”

Customers in the Lucky Crow Farm’s CSA also get good bang for their buck.

“I think that because they are investing upfront on the farm, they deserve a good deal on their food,” Olsen said.

Though most CSAs distribute fruits and vegetables, Audrey Comerford, Oregon State University Extension’s agritourism coordinator for Polk, Marion and Yamhill counties, pointed out that CSAs can include several other agricultural products, as well.

“It is important to remember that there are meat CSAs,” Comerford said. “There are even cut-flower CSAs, and there are a lot of CSAs that are combos where farms collaborate with one another in a given area and combine their offerings.”

Olsen’s CSA starts in mid-June with boxes of young greens, arugulas and other early-season crops and ends in mid-October with boxes of winter squash, carrots, radish-

es and other late-season crops. Overall, Olsen said she has more than 100 different varieties of crops growing on her three sites over the course of a growing season.

“The logistics are extremely difficult,” she said, “but at the end of the day, having a diversity of crops is almost a safer bet. If you have a crop failure, you have more than 50 other crops in play, so in a way, it provides security.”

Starting this year, the farm’s customers can preorder boxes of food on the Lucky Crow Farm’s website. The option has generated considerable interest, particularly with customers practicing social distancing during the COVID-19 pandemic.

“It is an online store,” Olsen said, “so when people come to the farm, there is no sort of lingering. I also am doing that at the Corvallis Farmers Market. People are pre-ordering produce and they can just grab and go.”

Olsen also will deliver boxes of fresh produce to customers in Independence, Monmouth, Dallas and Salem, something she does for a fee of \$10. The service is among several steps mid-valley farm-direct sellers initiated after the state instituted stay-at-home orders in March.

“Local farms are adjusting to the situation,” Comerford said. “They are changing their business model and providing services



Eden Olsen, left, and Ash Sigl at Lucky Crow's urban farm in Monmouth. The farm sells direct to consumers at two farm sites, as well as at the Corvallis Farmers Market and through Community Supported Agriculture.

PHOTO BY MITCH LIES | OSU EXTENSION

that I think are very important. And I think the public will remember that as we move out of this situation.”

Comerford believes that the COVID-19 crisis in fact could accelerate the embrace of a buy-local movement that has become a prominent part of food purchasing decisions over the past two decades. “I think there is more fear about going into large grocery stores and it is turning people’s awareness onto their local farmer down the road and the importance of shortening the supply chain.

“The public wants to know where their food is grown, meet the farmer and learn about agricultural practices like never before,” Comerford said. “With less than two percent of the general public directly connected to farming, there is a hunger to learn about these things.”

In addition to Lucky Crow, several local farms offer CSAs, including Mama Tee’s Farmstead in Willamina and Minto Island Growers in Salem.

Olsen started Lucky Crow four years ago, after spending her early 20s working on farms and managing farmers’ markets in Cal-

ifornia and Washington. Farming, she said, was always in her blood. “I got the farming blood from my dad,” she said, “and I learned to garden from my mom.”

Olsen’s father, Eric, was raised on a farm and her mother, Eve, grew up on a homestead. Her family helped launch her venture, donating a small area of the family farm that she has converted to vegetable production. She is also renovating an old barn on the family farm, installing a wash-and-pack operation and putting in some storage.

Also, this past winter, Olsen and her one employee, Ash Sigl, who has been with her for three years, constructed a hoop house, which she hopes will extend the farm’s growing season. “I am hoping next year to grow crops in the winter and later in the fall,” she said. “I think there is a huge market for a winter CSA.”

Looking ahead, Olsen said she plans to continue expanding and hopes to be operating Lucky Crow Farm well into the future.

“I love what I do,” she said, “and I really believe in what I am doing. I think it is important work.

“It is the most rewarding thing to put seeds in the ground and eventually hand someone some food,” Olsen said. “It is pretty amazing.”

MORE INFORMATION

For more information or to place an online order at Lucky Crow Farm: luckycrowfarm.com

For a listing of CSAs and farm stands in Oregon: oregonfb.org/oregonsbounty

For farms interested in adding a CSA to their business model or growing their current one, here is a resource produced by Portland Area CSA Coalition and Oregon State University Extension Small Farms Program: blogs.oregonstate.edu/csainfo/

For a list of farms in the Portland Area CSA Coalition: portlandcsa.org

PLANTING TO ATTRACT HUMMINGBIRDS YEAR-ROUND

PHOTOS BY NEIL BELL | OSU EXTENSION



Hummingbird on Manzanita



Agastache10-06: Hyssop



Mahoniacharity12-07b: Hybrid Mahonia



Ribeselkriver4-11b: Flowering Currant

By Neil Bell

OSU Extension Community Horticulturist

I doubt there is anyone in the mid-Willamette Valley that is not familiar with one of the most energetic and flamboyant of our native birds: the hummingbird.

These energetic birds seem almost constantly in frenetic motion, whether it is shows of acrobatic flight at full speed, or suspended in the air feeding from a favorite flower or chasing off their rivals from a favorite nectar source. In their ability to hover and even fly backwards they are unique among our native birds.

Two species of hummingbird may be found in the Willamette Valley. Anna's Hummingbird (*Calypte anna*) is resident year-round. The Rufous Hummingbird (*Selasphorus rufus*) is migratory, appearing from their wintering grounds in the southern U.S. and Mexico as early as late February and departing in late summer. Both species may be found in both rural and urban environments, so everyone can get a chance to enjoy them.

Food for both species is diverse. They will seek nectar from flowers and will also sip sugar-water from the familiar hummingbird feeder. They will also consume small insects and spiders for a protein fix. They will even feed on sap from trees, often taking advantage of holes in plants like pine drilled by sapsuckers.

Just as one might for insect pollinators, you can contribute habitat for these birds by planting your garden with flowers that attract and provide nectar for hummingbirds. In fact many of the plants that attract hummingbirds would also provide habitat for native pollinators and European honeybees. The types of flowers that specifically attract hummingbirds are often tube-shaped, in colors of red, orange, yellow or blue. Effective plantings consist of planting in "islands" with multiple attractive plant species. And it is very important to plant different species for continuous bloom throughout the year.

Of course, the wide array of native plants that attract hummingbirds come immediately to mind, as these are what the birds are accustomed to dining on during migration and during the growing season. But it is also worth thinking about selected non-native plants, especially for Anna's Hummingbirds, which overwinter in the region when no native plants are in bloom. It is speculated that the range of Anna's, which once extended

north only to San Francisco Bay, but which now extends to southern Vancouver Island, has expanded so greatly because of use of hummingbird feeders and the presence of blooms on non-native plants. The list below provides both native (marked with an asterisk *) and non-native shrubs and perennials which attract and help feed our hummingbirds and are grouped by season of the year. Some of the plants in a given season may also bloom in other seasons depending on the species or cultivar you select. Providing year-round bloom for hummingbirds can be done with just a few selections from each season.

SPRING

Oso Berry* (*Oemleria cerasiformis*), Oregon Grape* (*Berberis aquifolium*), Hairy Manzanita* (*Arctostaphylos columbiana*), Creeping Mahonia* (*Mahonia repens*), Flowering currant* (*Ribes sanguineum*), Fuchsia-flowered gooseberry (*Ribes speciosum*), Gummy gooseberry* (*Ribes lobbii*), Western Azalea* (*Rhododendron occidentale*), Western Columbine* (*Aquilegia formosa*), Western Bleeding Heart* (*Dicentra formosa*), Lupine* (native and non-native) (*Lupinus* spp.), Camas* (*Camassia quamash*), Penstemon* (native and non native, any penstemon; *Penstemon* spp.)

SUMMER

Orange Honeysuckle* (*Lonicera ciliosa*), Mexican Lobelia (*Lobelia laxiflora*), Showy Milkweed (*Asclepias speciosa*), Larkspur* (native and non-native; *Delphinium* spp.), Checkermallow* (*Sidalcea* spp.), Western Spiraea* (*Spiraea douglasii*), Japanese Spiraea (*Spiraea japonica*), Red Hot Poker (*Kniphofia* spp.), Sage (*Salvia* spp.), Goldenrod* (native and non-native; *Solidago* spp.), Snowberry* (*Symphoricarpos albus*), California fuchsia (*Epilobium cana*),

FALL

Glossy Abelia (*Abelia x grandiflora*), Chinese Abelia (*Abelia chinensis*), Hyssop (*Agastache* spp.), Hardy Fuchsia (*Fuchsia magellanica*),

WINTER

Chaparral currant (*Ribes malvaceum*), Spider flower (*Grevillea victoriae*), Hybrid Mahonia (*Mahonia x media*), Manzanita (*Arctostaphylos* 'Sentinel', 'Austin Griffiths', 'Siskiyou Pink')



**Looking for a larger
yard or a wide open space?
*I can help you.***



If you're looking to obtain some property to cultivate, I am here to empower your move. I am a full time local agent committed to making dreams become a reality. If you or anyone you know has any questions about the real estate market, you can reach me directly at the number below.

Committed, Energetic Service

Sandra Paoli
503.580.0160

Broker Licensed in the State of Oregon


Windermere
REAL ESTATE



sandrapaoli@windermere.com | www.paoliproperties.com
180 Main Street East, Monmouth



Polk 4-H, Master Gardener, Agriculture

By Jim Clawson
PECAN

10 years later...

BACKGROUND

The Smith Lever Act of 1914 provided for the establishment of the Agricultural Extension Service within the Land-Grant Colleges. The State of Oregon followed suit by establishing Agricultural Extension Service within the Oregon College of Agriculture in 1913. The 4-H program precursor was started in Polk County before the official beginning of Ag Extension. Over 90 years of Extension Programs have been available to Polk County.

Earlier efforts to establish a district started in 2004, but were not widely supported. In 2008 a group of mainly 4-H leaders formed the “Citizens for Polk County” to seek a permanent solution to the Extension funding for Polk County. They assembled information on the contribution of volunteers to emphasize the widespread interest to Polk extension pro-

grams. As budgets continued to be reduced and in face of elimination of funding from the School Security Act of 2002, the County Commissioners encouraged the formation of a separate tax district as the county’s participation in OSU Cooperative Extension. Throughout the election process, close contact was maintained with the County Commissioners.

PREPARING THE PETITION

The effort to form an Extension District was initiated by the Polk Extension Advisory Committee meeting on February 12, 2009. The Extension Citizens Leadership Committee was formed to develop the needed documents to petition for a ballot measure to form a District with Jim Clawson servicing as Chair Pro Tem and Roger Fletcher as Secretary Pro Tem. The target election was May 18, 2010 which was a general election and required a simple majority in favor of the measure. Other guidelines were to limit the tax rate to \$07.5 per \$1,000 assessed value and to recognize the interdependence of the Polk County Fair facilities and Fair itself. Drawing on recent successes of forming Extension Districts in other counties, Staff Chair Jim Hermes provided draft materials as a starting point. “Steering Com-

mittee” meetings were started in February and on May 5th a general meeting on the process of forming a District was held.

GATHERING SIGNATURES

While the focus of this step in the process was the gathering of the required signatures to place the initiative on the May 18, 2010 ballot, it was soon apparent that voters needed to have more information as to what OSU Extension is and what programs are being conducted within the County.

The decision was made to utilize volunteers and not use any paid petition gatherers. Master Gardeners, 4-H leaders and other volunteers played a major role in the signature gathering process including efforts at the Polk County Fair, community events, group meetings, door-to-door, and neighbor-to-neighbor efforts. Voter registration lists and maps were provided to assist signature gathering. Individuals and teams took on the challenge of obtaining the required signatures.

The County Clerk certified the valid signatures (6,913 of the 8,000+ gathered) on Nov. 16, 2009. After two public hearings, the county commissioners placed the measure on the May 18, 2010 ballot.



Culture, Forestry Extension District

SAVE POLK EXTENSION (POLITICAL ACTION COMMITTEE)

The January 6th action of placing Measure 27-100 on the ballot set the stage for a political campaign and the formation of a Political Action Committee (PAC) with Jim Clawson and Roger Fletcher as Co-Chairs and Linda Fox as Treasurer. A central campaign theme or slogan was chosen – “Too Good To Lose”. Materials and speakers information were geared to that theme.

Bernie Faber, Karen Lippmeyer, Barbara Nichols, Daryl Eash, N. John Hansen, Roger Fletcher and Jim Clawson volunteered to serve as the speaker’s bureau for presentations to groups in the county. The speakers appeared before service and civic groups, agriculture organizations, garden clubs and other organizations.

TRANSITION TO A DISTRICT

Ballot Measure 27-100 passed in all precincts during the May 18 election with a 64 percent approval. This impressive result gives notice of the support the people in Polk County have in the OSU Extension programs. The

funding levels allow the return to more active program delivery.

On June 9 the Polk County Commissioners formed the new 4-H, Master Gardener, Agriculture, Forestry Extension District with Order 10-08. At the first District meeting the Board authorized the leveling of the full 7.5 percent tax rate for this first year.

A celebration event was held in July 2010 to thank all the volunteers who made this possible. The event also recognized the contributions outgoing Staff Chair, Jim Hermes, made while serving in the county and getting the District process moving. Incoming Staff Chair Derek Godwin was welcomed and presented the next steps for the rejuvenation of Polk Extension. Extension Director and Vice Provost, Scott Reed congratulated the success and reviewed the challenges ahead. Greg Hansen, filling in for Commissioner Mike Propes, voiced the support of the County and the desire for a close working relationship with OSU Extension.

STILL THRIVING

Today, the OSU Extension Service Polk County still provides the same services and programs that our community valued when

voting to support our district. We run a strong 4-H program that empowers young people with hands-on learning experiences to help them grow and thrive. We provide research-based information for backyard gardeners and green industry professionals. We work with forest owners, foresters and other natural resource managers to share knowledge about the latest techniques in natural resource management through educational programs and materials. We have also since expanded our program reach to include a vibrant and expanding Small Farms program, which serves commercial small farm entrepreneurs as well as non-commercial small acreage landowners; also, our Agritourism program that connects consumers and tourists with agricultural products, producers and places, usually on farms and ranches. Our groundwater education specialist provides education and answers questions to homeowners with well and septic systems, and we provide, free-of-charge, well water nitrate screening in our Polk County Extension office.

By Chrissy Lucas

OSU Extension Groundwater Education

Will my septic system treat COVID-19?

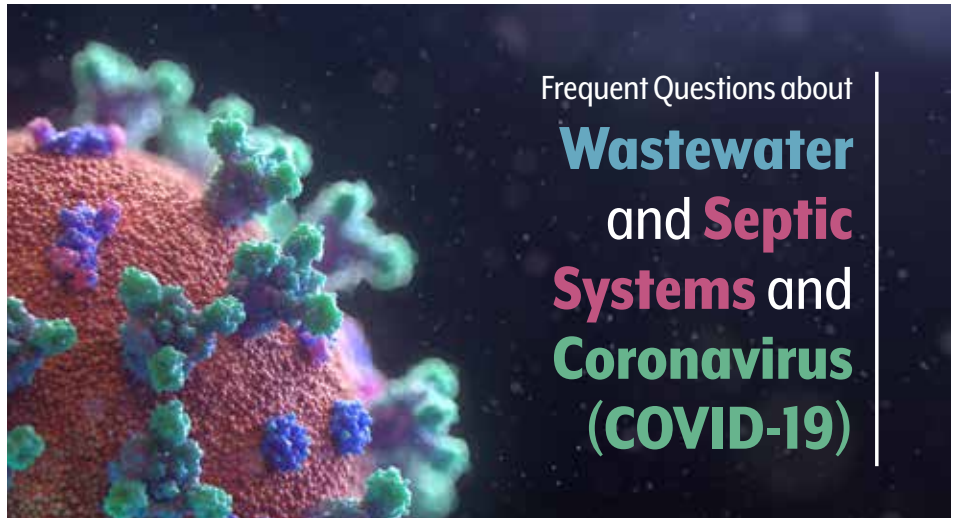
While decentralized wastewater treatment (i.e., septic tanks) do not disinfect, EPA expects a properly managed septic system to treat COVID-19 the same way it safely manages other viruses often found in wastewater. Additionally, when properly installed, a septic system is located at a distance and location designed to avoid impacting a water supply well.

Can I get COVID-19 from wastewater or sewage?

The World Health Organization (WHO) EXIT has indicated that “there is no evidence to date that COVID-19 virus has been transmitted via sewerage systems, with or without wastewater treatment.”

Do wastewater treatment plants treat COVID-19?

Yes, wastewater treatment plants treat viruses and other pathogens. Coronavirus,



Frequent Questions about Wastewater and Septic Systems and Coronavirus (COVID-19)

PHOTO BY FUSION MEDICAL ANIMATION | UNSPLASH

which causes COVID-19, is a type of virus that is particularly susceptible to disinfection. Standard treatment and disinfectant processes at wastewater treatment plants are expected to be effective.

Is it okay to flush disinfecting wipes?

EPA urges Americans to only flush toilet paper. Disinfecting wipes and other items should be properly disposed of in the trash, not the toilet. These wipes and other items do not break down in sewer or septic systems and can damage your home’s internal plumbing as well as local wastewater collection systems. As a result, flushing these wipes can

clog your toilet and/or create sewage backups into your home or your neighborhood. Additionally, these wipes can cause significant damage to pipes, pumps, and other wastewater treatment equipment. Sewer backups can be a threat to public health and present a challenge to our water utilities by diverting resources away from the essential work being done to treat and manage our nation’s wastewater. Disinfecting wipes, baby wipes, and paper towels should NEVER be flushed.

Adapted from <https://www.epa.gov/coronavirus/frequent-questions-about-wastewater-and-septic-systems-and-coronavirus-covid-19>

WATCH OUT FOR A NEW PEST TARGETING OAKS

By Marc Bell

PSWCD Senior Resource Conservationist

While folks have a lot more time in and around their own property right now, it’s a perfect opportunity to get to know your property better and explore areas you don’t typically spend a lot of time in. While you’re there, if you have oak trees, please be aware there is a new threat coming. The Oak Ambrosia Beetle was just recently found in Oregon for the first time as reported by the Oregon Department of Forestry Facebook page in late March. Since Oregon

White Oak trees take decades to reach maturity and can live for well over 300 years, any new threat to them should be taken seriously. If landowners get proactive about early detection, they can mitigate the spread and damage this insect could cause with minimal work.

While damaging in and of itself, the Oak Ambrosia Beetle can also leave trees susceptible to and spread Japanese Oak Wilt. Routine scouting for signs and symptoms of wilt will help prevent spread and minimize damage as much as possible. Rust-colored, crumpled leaves, premature defoliation, and stem die-back are typical wilt symptoms, particularly

in late summer, well before normal fall color changes.

You likely won’t find this beetle on your property yet, but we’d like to keep it that way. If you have reason to believe you might be seeing some on your land, in an oak wood pile, or just want to be proactive about it, regular monitoring will go a long way to keeping infestations localized and prevent spreading.

Virtually all species of oak, including those native to Oregon can be hosts to this particular invasive threat. Oak Ambrosia Beetle

See PAGE 13

Food Preservation Resources

By Elani Elkins

OSU Extension, Family & Community Health

As we start another season of growing, harvesting, and preserving food in these frequently changing and uncertain times, Extension is here to answer your questions and help turn your summer harvest into a winter food source. Whether you're new to preserving or a seasoned expert, there are a number of resources available to you through OSU Extension.

Remember to get your pressure canner gauge tested at least once a year. Now, at the start of the canning season, is a great time to make sure it's still working properly! While our offices are closed, we are still providing this essential service to the community. Call the Polk County office to schedule a time for testing or bring your lid with gauge attached

to the Marion County office on Wednesdays between 1 and 3 p.m..

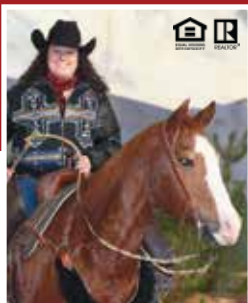
Download the free Canning Timer & Checklist App (Android and iOS compatible). This app, designed for people with previous canning experience, allows you to select your food, jar size, pack type, canning method, and elevation in order to view a customized checklist and timer for processing. It will remind you of the steps required to prepare jars and other canning equipment and take you through the canning process from start to finish.

The OSU Food Preservation Hotline will be opening in mid-July (toll-free 800-354-7319). The hotline is staffed by volunteers Monday to Friday from 9 a.m. to 4 p.m. When the hotline is closed, you can leave a message and they'll get back to you. Another great way to get your food preservation and safety questions answered is through Ask an Expert, Extension's online question-and-answer service.



PHOTO BY ELANI ELKINS

For food preservation tips, recipes, and information on storing food for safety and best quality visit <https://extension.oregonstate.edu/mfp/publications>.



Horsepower Real Estate

Tory Boline, Broker | Cell: 503.991.6783
4975 Enterprise Rd. | Dallas, Or

ToryBoline@gmail.com | ToryBoline.com

Specializing in Equestrian Properties Acreage, Farms, Ranches & Residential

17940 Falls City Rd. — Large Diverse Acreage in Dallas with Water Rights from the Luckiamute River and a Pond. Farmhouse, Barns, 3 Water Meters, Well, Possible 2nd Residence, 2nd septic approval, Hay fields, pasture and trees (Fir, Oak and Pine). Great location and beautiful views. Great potential for many crops or livestock. Fenced and Cross



Fenced with water lines for water troughs throughout. 2 ways to purchase: **109.15 acres for \$1,250,000, MLS# 762292.** **180.55 acres for \$1,599,900, MLS# 758164.**

TABRealEstate | WesternOregonHorseProperties.com

From PAGE 12

infestations can be identified by the presence of white boring dust and frass on the ground or surrounding foliage at the base of a tree or fallen logs. Tiny entrance and exit holes in the bark may also be indicative of a beetle problem. Of course other species of beetles can produce similar damage – therefore, identification of this pest cannot be guaranteed unless a specimen is observed under a microscope. But if you are seeing boring dust around oaks you otherwise cannot recall seeing in previous years, it might be wise to try to find a specimen for identification.

Adults are rust-colored or reddish brown and measure about 4.5mm in length. The venter is a golden brown color, females being slightly lighter than males, with long yellow hairs sparsely

distributed. The head is flattened at the front and usually darker than the rest of the body. Elytra, the hardened forewings which cover the beetle's abdomen, have distinct, finely punctured striae and several pointed "teeth" at the posterior margin. The striae are thin lines made of tiny holes running parallel to the edge of the body. The declivity or posterior slope of the abdomen is more pronounced in males versus females with long golden hairs present in both sexes. There are a number of look-alike species of beetle that are not invasive as well, so if you feel like you may be seeing evidence of a beetle that generally fits this description, please get in contact with Oregon State Extension services, Oregon Department of Forestry, or the USDA Animal and Plant Health Inspection Service (APHIS) and the state plant health director.



HEDGEROWS FOR

The Garnett Family working Red Prairie Farm. Hedgerows enhance the rural landscape and provide important benefits to farmers, pollinators, wildlife and the natural environment.

By Pryor Garnett
Contributing Writer

WHY HEDGEROWS?

By the end of this winter our family will have put in three-fourths of a mile of hedgerows on our family farm in northwestern Polk County. Why in the world would anybody do that? This is the story of why and how we did it.

Our 90-acre organic farm is on a busy road that cuts between Highways 18 and 22, with neighbors who farm conventionally using herbicides and other chemicals. Besides being organic, we have honeybees and a healthy population of native bees. Hedgerows along the roads and stream banks protect against accidental spray drift, provide habitat and nourishment for the bees, increase privacy, and are beautiful when in flower.

PLANNING A HEDGEROW

For privacy and protection from spray drift we needed our roadside hedgerow to be tall and fairly solid. To feed the bees and

be attractive, we wanted lots of flowers and a variety of foliage throughout the year. To keep from losing too much cropped acreage we wanted narrow hedgerows right along the edges of the fields. And to keep everything affordable we needed to find inexpensive plant materials and to use equipment and tools we already had on the farm.

Our hedgerows have over a dozen different species of native, flowering shrubs. The species were chosen based on when they flower, how big they'll get, whether they like sun or shade, how much water they need, and how easy they are to grow from hardwood cuttings (more about that later). We gathered that information from free, online sources (listed at the end of this article). Of the species we chose, the most successful so far have been Pacific Ninebark, Douglas Spirea, Red-Flowering Currant, Coyote Brush and Black Twinberry.

To minimize lost acreage our hedgerows are single-row so they won't get too wide. To make a solid screen for privacy and spray protection, we spaced the plants 3'-5' apart. And, we chose shrubs that would be 6'-10' tall when mature.

Using hardwood cuttings for most of the

plants was the key to making the project affordable. A hardwood cutting is just a thick stick cut from a living plant in the winter and stuck deep in the ground. Once in the ground, the stick develops roots and puts out a few leaves, and with a little care (mostly summer watering while small) in a year or two will be a living, growing shrub. It seems too easy to work, but it does! Over 90 percent of the plants in our hedgerows are from hardwood cuttings.

PLANTING THE HEDGEROW

A hedgerow site needs to be prepared beforehand. While some sources recommend spraying out existing vegetation with herbicides and/or solarizing the ground for a year under black plastic, we take a simpler approach. In the spring or summer, we dig out any blackberries and repeatedly mow (scalp) a 4' wide strip with our brush cutter or riding mower. Then in the late fall, we rototill a strip along the center of the mowed area.

Hardwood cuttings come from mature, living plants, and you need permission to take them if you don't have sources of your own. Plan to gather the hardwood cuttings just a



A WORKING FARM

PHOTOS BY | OSU EXTENSION

few days before planting, because the longer you wait to plant them, the less energy they'll have to put out roots.

The NRCS in Corvallis maintains "cutting blocks" of hedgerow plants, and gave us permission to take cuttings there. In a few years when our hedgerows have matured, we intend to let others take cuttings from them for their own hedgerow plantings.

In Western Oregon, plant your hedgerow in mid-January to early February. By that time, mature plants are dormant and ready for taking cuttings, and the soft, wet ground makes it easier to push in the sticks. Put tree tubes around the new plants right away to protect them from deer, voles and other hungry wildlife.

Then in spring, spread mulch along the newly planted hedgerow to suppress weeds, retain moisture, and shade the ground during summer.

Water the new plants every week or so during their first summer. After that, the plants' roots should be deep enough to get through the summer without watering. Inevitably, some of the new plants don't make it through the summer. Just replace them with new hardwood cuttings planted in January/

February, mulched in the spring and watered the following summer.

So far, the roadside hedgerow we planted in early 2019 is looking great, and in a week or two we'll start watering the streamside hedgerow we planted last February.

CONCLUSION

Hedgerows enhance the rural landscape and provide important benefits to farmers, pollinators, wildlife and the natural environment. Putting in a new hedgerow is remarkably easy and inexpensive, and is an investment that will pay dividends for decades.

INFORMATION ABOUT HEDGEROWS IN WESTERN OREGON

"Ability of Pacific Northwest Native Shrubs to Root from Hardwood Cuttings - Plant Materials Technical Note No. 30," NRCS Corvallis, 2002

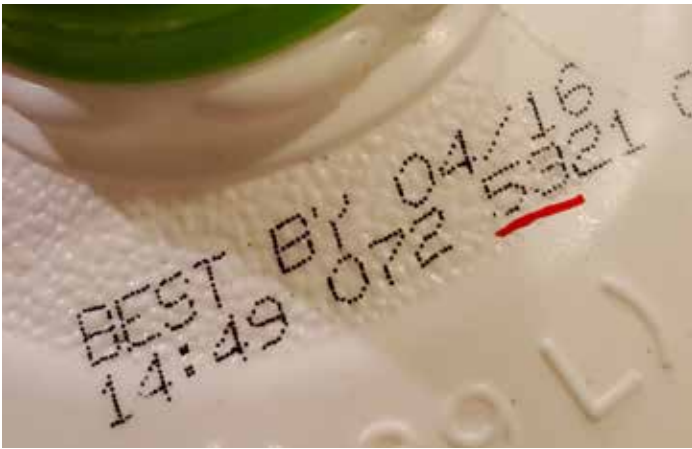
"Field Guide for the Identification and Use of Common Riparian Woody Plants of the Intermountain West and Pacific Northwest Regions," NRCS Plant Materials Centers Idaho & Oregon, 2008

"Guide for Using Willamette Valley Native Plants Along Your Stream," Linn County SWCD, 1998

"Hedgerow Planting for Pollinators - Western Oregon and Washington," The Xerces Society, 2013

ABOUT THE WRITER

Pryor Garnett grows certified organic wheat and other small grains on a 90-acre family farm just south of Sheridan, Oregon. Garnett's Red Prairie Farm is a 2017 Flagship Farm of the Oregon Bee Project, certified organic by Oregon Tilth, and has a small farm stand in Cedar Mill (outside Portland). Pryor chairs the Policy Committee of the Organic Farmers Association (a national organization representing the interests of organic farmers and ranchers) and is a member of the Farmers Advisory Committee of the Organic Trade Association and of the Polk County Farm Bureau.



Milk jugs with state dairy plant codes underlined. 41 indicates the product was made in an Oregon plant; 53 indicates Washington.

JENIFER CRUICKSHANK | ???

EAT AND DRINK LOCALLY: DAIRY EDITION

By Jenifer Cruickshank

OSU Extension, Dairy Management

In Oregon, we are blessed to have an active, diverse dairy industry. Dairy farmers work hard year round to produce safe, nutritious milk that is processed regionally into milk to drink with meals and snacks or is made into more than a dozen different products. It's easy to eat locally when you shop in the dairy case.

There are five licensed dairies in Polk County. Milk from these farms goes to Andersen Dairy, Darigold, or Organic Valley. (The last two are cooperatives that also sell milk to other processors.) Some of the milk from these farms gets bottled into cartons and jugs. Some gets made into creamer, cottage cheese, sour cream, or yogurt. Some of it becomes butter. All of these products are processed locally in the Willamette Valley or southwestern Washington and are locally available.

After being picked up from the farm by a milk truck (you may have seen these tanker trucks on the highway), the milk is delivered to a milk processing plant. Before the milk is unloaded, samples taken at the farm by the milk truck driver are tested in the plant lab for milk components (fat and protein percentages) and antibiotic residue. Any milk found to be contaminated with antibiotics is dumped. It never enters the processing plant. The farmer who goofed and accidentally did not divert milk from a sick cow who was being treated must pay for the entire truckload of milk. This type of incident happens very, very rarely.

Speaking of dumping milk, at the time of this writing (early May), you may have read or seen stories about truckloads of milk being dumped and at the same time have seen restrictions on milk purchases in grocery stores. COVID-19 has turned most things upside down, including the milk supply chain. Milk produced in a region is balanced (bought and sold) among the different processing plants and cooperatives so that the fluid milk market is satisfied first (fluid milk being the most perishable product). Once that need has been met, then the milk goes to the manufacturing of other dairy products.

Oregon has almost 30 cheesemakers, large and small. If you want to drink locally produced organic milk or eat yogurt made from it, you can.

When the expected destination for certain products suddenly disappears (like schools and restaurants closing), that ripples up the chain. A processing line in a plant that normally puts milk into half-pint cartons for kids at school can't instantly become a line that puts milk into gallon jugs for the supermarket. The 7 percent of the US milk supply that normally goes to schools now can't. And the summer vacation adjustment (partly that more milk goes to ice cream plants) hasn't happened yet. Likewise, restaurants that used to buy 200 pounds of shredded cheddar cheese (in 20-pound bags) per week now are only buying 60 pounds. Or zero pounds. That leaves more

cheese in cold storage awaiting a buyer and causes more processing line back-ups.

Sometimes, in times like these, even though the cows are blissfully doing their thing, there is no place for their milk to go. In this case, the milk gets dumped. Milk is very nutritious, and people are a much better destination than the manure-handling facilities on dairy farms or being spread directly on fields. (It is never released into waterways.) Granted, the nutrients will ultimately nourish the soil where they are deposited, but that's not the best use. In some cases, milk with no home is being added to the diets of the cows that produced it, although cows give much more than they would be fed. While milk dumping has, sadly, occurred in other parts of the country, it hasn't happened in Oregon, in part due to the diversity of the dairy products made here.

You can shop confidently in your favorite dairy case knowing that the milk came from your bovine neighbors and their farmers. How do you know for sure? Look for the plant code stamped or printed on the packaging. Oregon plants start with "41"; Washington plants start with "53". (Some Oregon milk goes to Washington and vice versa.) See the photos for examples.

Oregon has almost 30 cheesemakers, large and small. If you want to drink locally produced organic milk or eat yogurt made from it, you can. If your preference is for milk bottled on farm, you can get that, too. Local butter? Yes. Cottage cheese? Yes. Maybe it's all about ice cream? There's lots of that produced locally as well. Enjoy our good fortune to live in a region with so much dairy goodness!



Come visit this 23-year-old, destination nursery at the edge of the beautiful Coast Range foothills...

- Display gardens established with diverse plantings
- 5 large greenhouses packed with plants for sale
- Ornamental bulbs, perennials, vines, shrubs, and trees including: exotics, garden classics, West Coast natives

Visit our website for more information:
 Find COVID-19 updates at www.dancingoaks.com/c19
 Browse our catalog at www.dancingoaks.com/plants

17900 Priem Road, Monmouth, Oregon 97361
 info@dancingoaks.com • 503-838-6058
 Facebook & Instagram: @DancingOaksNursery

Grossman & Weston Gravel, Inc.
Family Owned & Operated

We carry Garden Compost, Garden blended mixes, Compost blended soil for your lawns, Several sizes of Round Rock for your lawn decor needs. We carry 2 different Dry River Bed mixes of Round Rock and Crushed Rock for Driveways.

We Accept:

Call to schedule a delivery U-haulers welcome. Call for directions
503-838-5470 or 503-510-9596

Buying or Selling Real Estate?
 Contact me for **PROVEN RESULTS**

DONNA GRAHAM
 Broker Licensed in Oregon, CRS, ABR, GRI
503-931-5677
d.graham@kw.com |

kw CAPITAL CITY
KELLERWILLIAMS
 Each Office is Independently Owned and Operated.

Land Management Problems?

Do you own or manage a small farm, woodland or wildlife acreage in Benton, Polk or Yamhill Counties?
An OWEB Small Grant might just be what you're looking for!

OWEB Small Grants award up to \$15,000 for on-the-ground projects that work to improve:

- Productivity and efficiency of grazing systems
- Animal waste management
- Erosion control
- Forest management practices
- Irrigation
- Stream side vegetation
- Rainwater collection
- Instream fish and wildlife habitat
- Culvert replacements
- Plant or animal pest management
- Noxious weed control
- Easy Application Process!

Application windows offered quarterly in 2020:

7/27 - 8/10
 10/26 - 11/9

Contact Jackson Morgan | 503.623.9680 x107 | jackson.morgan@polkswcd.com

Marr Bros. Bark
Commercial & Residential

Competitive Prices & FREE Estimates!

- Fir
- Top Soil
- Hemlock
- Sawdust
- Playground Chips
- Wood Chips
- Compost
- Hog Fuel
- Rocks

875 S Pacific Hwy | Monmouth
503.838.1830
www.marrbrosbark.com

kw CAPITAL CITY
KELLERWILLIAMS
 1900 SW Hines St., Salem, OR 97302
 Each office is independently owned and operated.

Cornerstone Team

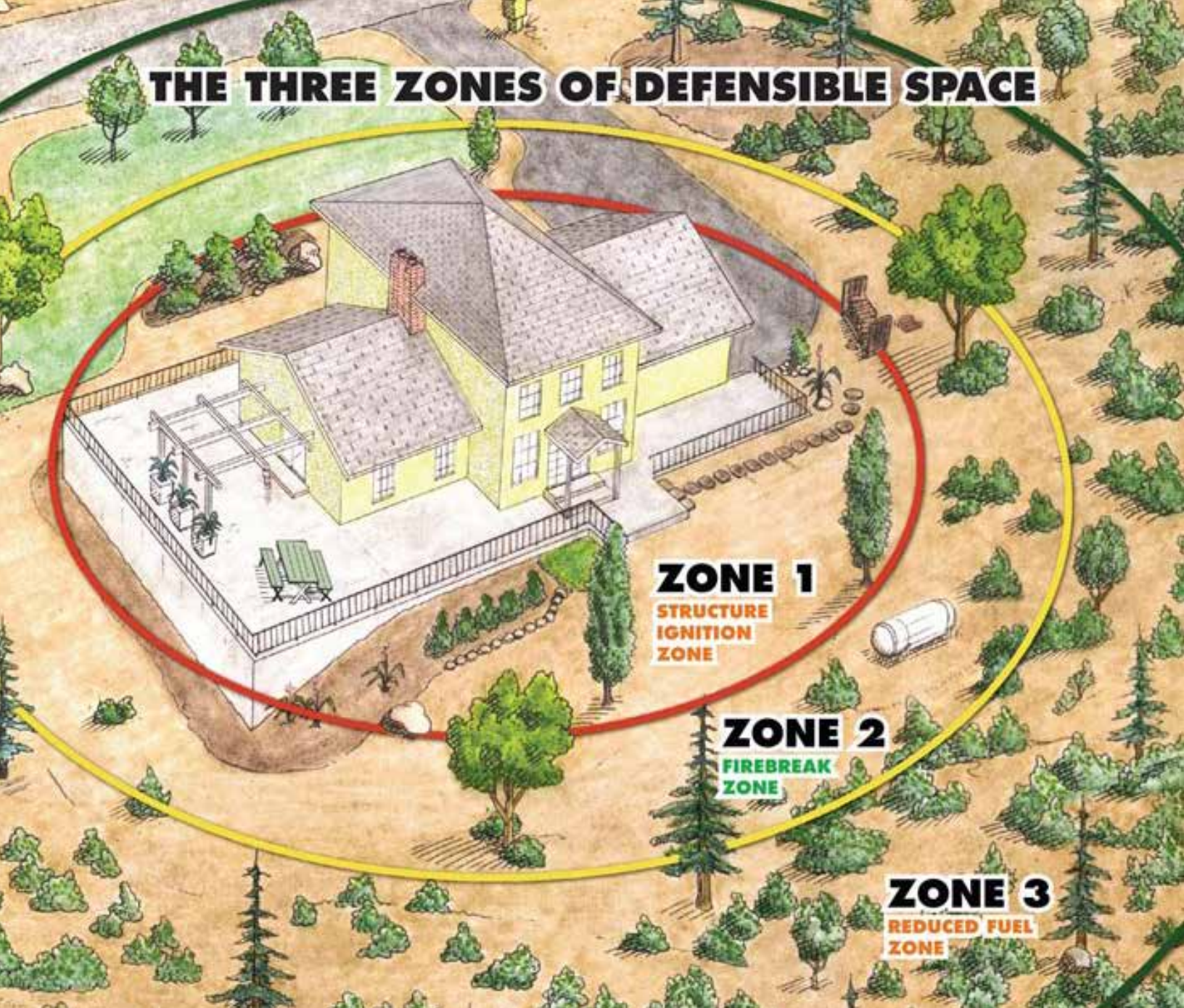
Yolanda Zuger
 Principal Broker
 503-580-7031
yolandazuger.com

Claire Blosser
 Buyers Agent Broker
 541-220-7316
claireblosser.valuedagent.com

Licensed in the State of Oregon

289 E. Ellendale Avenue #603 in Dallas

THE THREE ZONES OF DEFENSIBLE SPACE



The three zones of defensible space.

GRAND COUNTY WILDFIRE COUNCIL

DEFENSIBLE SPACE: A Landowner's Best Bet at Mitigating Wildfire Damage

By Jackson Morgan

Farm Specialist, Polk SWCD

We might be dealing with on and off spring weather at the time of this writing, but the stretch of weather we had over Mother's Day weekend was a great reminder that summer is on its way, with all of its associated property management challenges. While I've often written about invasive and noxious weed control and management, given we are heading into the season of warmer and drier weather, and are faced with a climate that is trending towards longer and hotter summers, I feel there is a more pressing topic to cover, that being doing everything you can to protect your family, your property, and yourself from wildfire danger.

Thankfully, last summer, the state of Oregon had a relatively minor fire season, especially when compared to years past, where the smell of smoke was ever present every time you took a step outside. However, the southern portion of the state has already declared the opening of fire season, as of May 1, which put restrictions on outdoor burning. The northern part of the state has yet to declare fire season, but it is undoubtedly coming. With that in mind, the threat of wildfire increases daily, and there are several simple management techniques that you can employ to help improve your chances of limiting damage and destruction if a wildfire were to roll through your property.

The first, and most important of these techniques, is to utilize and implement the concept of a defensible space. Essentially, a defensible space can be conceptualized as a series of rings, or buffers, around your home,

outbuildings, barns, etc. The first, and arguably most important of these zones is the 30-foot zone extending outward from your home. This zone, is further broken into two subzones, the immediate five feet surrounding your home, and the remaining 25 feet. The entirety of this 30-foot zone, should be kept "lean, clean, and green"; lean referring to discouraging flammable or fire prone vegetation around the house and vegetation in general is kept at a minimum, clean referring to keeping the area free and clear of

Essentially, a defensible space can be conceptualized as a series of rings, or buffers, around your home, outbuildings, barns, etc. The first, and arguably most important of these zones is the 30 ft. zone extending outward from your home.

dead vegetation and flammable debris, and green meaning that plants in the 30-foot zone, are kept sufficiently watered, green, and healthy. The subzone, of 5 feet extending outward from the home, should be a non-combustible area that has a low ignition potential if embers were to land on/in it. This zone should consist of gravel, pavers, or the like, and be kept free from any and all flammable debris. The next zone, extends from 30 feet to 100 feet., or even 200 feet. if the

property is especially brushy. While the management associated with this zone is less intense than within the first zone, annual activities should include removal of dead, downed or thick accumulations of vegetation and debris. This zone should also be regularly mowed, if possible, to a height of no more than 4 inches. On a longer time frame, management should include the removal of invasive and noxious species, reducing ladder fuels (fuels that allow a fire to grow vertically, and thus make ember spread via air much more likely) by limbing trees and removing shrubs that lie directly underneath trees, and thinning or removing thick clumps of vegetation or trees, or if you elect to leave an "island" of trees or brush, be sure to clean out a 5- to 10-foot zone around the "island" to break up fuels.

The third and final zone, extends from the edge of the second zone, to the edge of your property line. While management in this zone doesn't need to be as intense as in the first two zones, care should still be taken to eliminate or reduce ladder fuels, reduce accumulations of debris, but keeping in mind that leaving some downed debris, etc. serves as good habitat and for good soil health.

Oxygen, heat, and fuel are the three components that make a fire, and while oxygen is here to stay (hopefully), and often times, the source of heat is out of our control, we all have the ability to help reduce fuels around our homes, that might limit the damage that wildfire can do. OSU Extension provides a wealth of knowledge and resources regarding this topic, and most of them are available to download online, for free at <https://catalog.extension.oregon-state.edu/>.

Conservation Reserve Program

CP-22

RIPARIAN BUFFER

Water Quality Enhancement | Wildlife Habitat Enhancement | Carbon Sequestration



Why Choose CRP? You Benefit. Land, Water and Wildlife Benefit.

Riparian tree buffers improve water quality and provide vital habitat for wildlife. The Conservation Reserve Program (CRP) provides farmers and landowners with practices like this to achieve many farming and conservation goals. Whatever the conservation challenge - soil conservation, water quality protection, or wildlife habitat enhancement - CRP is a proven land performance and management solution.

Why Riparian Buffers?

For farmers and landowners interested in improving water quality and creating habitat for fish and wildlife, a riparian buffer - a strip of trees bordering perennial or seasonal streams, waterbodies and wetlands areas - is a beneficial solution. Offered in **continuous sign-up**, CP-22:

- Filters nutrients from runoff
- Traps sediment
- Cools water temperatures
- Stabilizes stream banks
- Sequesters Carbon

Financial Benefits

CP-22 participants are guaranteed:

- 10-15 years of annual rental payments with an additional 20% Rental Rate Incentive
- Payments covering up to 90% of the eligible costs of establishing the practice
 - 50% from a Cost-Share Payment and
 - 40% from a Practice Incentive Payment (PIP)
- Sign-up Incentive Payment (SIP) up to \$100/acre
- Maintenance Rate Incentive
- Mid-Contract Management Cost Share
- Additional incentives may be available in your state under the Conservation Reserve Enhancement Program (CREP)

WETLAND RESTORATION ON FLOODPLAINS

Filter Runoff | Water Quality Enhancement | Wildlife Habitat



Why Choose CRP? You Benefit. Land, Water and Wildlife Benefit.

Wetland restoration on floodplains improves water quality and creates critical habitat for wetland species. The Conservation Reserve Program (CRP) provides farmers and landowners with practices like this to achieve many farming and conservation goals. Whatever the conservation challenge – soil conservation, water quality protection, or wildlife habitat enhancement – CRP is a proven land performance and management solution.

Why Wetland Restoration?

Restoring former or creating new wetlands that had been converted for agricultural use is critical to long-term environmental health and ecosystem performance. Restoring wetland functions and values can yield tremendous benefits, including temporarily holding runoff to reduce downstream flooding, filtering sediment, nutrients, and chemicals to protect water quality, and supporting hundreds of species of birds, plants, amphibians, and other wildlife. Offered in **continuous sign-up**, CP-23:

- Provides vital habitat for waterfowl, grassland birds, and other wetland species
- Filters sediment and nutrient runoff
- Reduces downstream flooding damages

Financial Benefits

CP-23 participants are guaranteed:

- 10-15 years of annual rental payments with an additional 20% Rental Rate Incentive
- Payments covering up to 90% of the eligible costs of establishing the wetland restoration practice
 - 50% from a Cost-Share Payment and
 - 40% from a Practice Incentive Payment (PIP)
- Sign-up Incentive Payment (SIP) up to \$150/acre
- Mid-Contract Management Cost Share
- Additional incentives may be available in your state under the Conservation Reserve Enhancement Program (CREP)

Determining Hay Quality Using Visual Factors



By Gene Pirelli

OSU Extension Professor Emeritus,
Livestock and Forage Specialist

You have heard the old saying that “April Showers Bring May Flowers.” Those showers also bring grass growth in the Willamette Valley and hay cutting time, provided the showers stop at some point.

The ideal cutting time for cool season grasses like tall fescue, orchardgrass and perennial ryegrass, along with first cutting alfalfa (all depending upon elevation) is sometime during the month of May. Maturity of grasses or legumes is the major factor that determines the feeding quality of hay made from these plants. As the plant matures or gets “older” the crude protein and energy available to the animal eating the hay is reduced dramatically.

For many years, Oregon State University

has recommended a laboratory analysis to determine hay quality factors such as protein, energy and digestibility. Yet the majority of hay bought and sold is done on visual factors, or in other words, “what the hay looks like.”

Following are some items that can be used to visually evaluate baled hay for quality:

1. Maturity can be determined by the presence of seed heads and if the seeds in the head are soft and immature or fully developed. Remember that maturity is directly related to fiber, digestible energy, and crude protein levels in hay; fiber increases while digestible energy and protein decrease with advancing maturity in grasses and legumes.

2. Odor can indicate heat damage (tobacco-like odor) and mold from spoilage of hay that was too wet at baling. “Dusty” hay can also occur from hay that has molded and dried, the dust being mold spores in the bale.

3. Color is largely an appearance factor that is not always related to feeding value, although it can indicate presence of pre-harvest plant diseases or dead leaves or leaching of soluble sugars from rained-on hay. Over mature plants are often yellow. High levels of leaf loss from raking, turning, and baling excessively-dry material can be determined by the color of the hay.

These are just a few of the factors that can be used to determine the dollar value and feeding quality of hay.

More detailed information is contained in “Hay Quality Sensory Evaluation Guidelines” which is available at:

<https://extension.oregonstate.edu/sites/default/files/documents/9901/hay-sensory-evaluation-2007.pdf>

Gene Pirelli, Professor Emeritus, OSU Department of Animal and Rangeland Sciences



NOW YOUR NORTHWEST
DISTRIBUTOR FOR
**HIQUAL LIVESTOCK
EQUIPMENT**

CALL FOR IN STOCK
ITEMS AND TO ORDER!



8870 RICKREALL RD. | RICKREALL, OR 97371 | 503.623.5000

Mon-Fri: 8am-6pm | Saturday: 8am-4pm | Sunday: Closed

ALL YOUR SUMMER PROJECT SUPPLIES

Husqvarna®

**RIDING & ZERO TURN MOWERS,
CHAINSAWS, TRIMMERS.**

DON'T HAVE WHAT YOU WANT?
WE CAN ORDER IT!

WE OFFER IN HOUSE SMALL ENGINE SERVICE TOO!



SHOP OUR DEALS TODAY! IN STOCK ITEMS ONLY, NO SPECIAL ORDERS OR RAINCHECKS.



**\$5 Off Panhandle Or Rock N Roll
Shirt With Purchase Of Jeans.**
Coupon Must Be Present. Through 9/30/2020.



10% Off All Hutchison Products.
Coupon Must Be Present. Through 9/30/2020.



\$10 Off A Pair Of Twisted X Shoes.
Coupon Must Be Present. Through 9/30/2020.

We're Open!

Helping to beautify Polk County homes and parks since 1992.

Thousands of Plants to Choose From!

Wed-Sat | 9-4
Check out our website for plants & services.



Come let our knowledgeable and helpful staff assist you in obtaining the yard of your dreams!



20% off bamboo in 15 gallon & larger pots
20% off all Dinosaur food plants
10% off all other plant purchases with coupon
Take Advantage of These Great Offers Today!
Expires 7/11/2020



- Bamboo
- Trees & Shrubs
- Ornamental Grasses
- Hardy Ferns & Hostas
- Assortment of Vines
- Hardy Bananas
- Hummingbird & Butterfly Attracting
- Deer Resistant
- Drought Tolerant
- Perennials
- Figs & Blueberries

Visit Us Today! Great selection of plant material!



Daryll's Nursery

Growers of Hardy Plants Since 1992

Gift Certificates Available



15770 W Ellendale Rd, Dallas
503-623-0251 www.daryllsnursery.com