City Embraces Rural Innovation

By Mitch Lies
Cultivating Editor

Over the past couple of years, the more Shawn Irvine researched the idea of building economic development in the city of Independence through rural innovation, the more he realized that he had struck on something unique.

“I kept thinking somebody has probably done this before,” said Irvine, economic development director for the city, “but the more we looked into it, the more people said, ‘Well, nobody has really done this before.’”

So, what did Irvine do? “We kept going forward,” he said.

Irvine, along with local farmers and the Oregon State University Agricultural Experiment Station, developed pilot projects in farm innovation, tracing products from farm to fork and monitoring temperature, humidity and location along the way, and saw enough successes that they realized they may be on to something.

Irvine’s workload, however, limited what he was able to devote to the effort, so, working with Polk County Commissioners and the Strategic Economic Development Corporation, he was able to secure funds to hire a rural innovation catalyst.

Today, Alex Paraskevas, Polk County’s new rural innovation catalyst, is working with Irvine on what is being tagged as the Smart Rural Community effort to encourage the establishment and growth of technology and agriculture-based companies in Polk County. As the innovation catalyst, Paraskevas, who started Feb. 12, also is working to foster entrepreneurship and education programming in STEAM, or science, technology, engineering, the arts and mathematics.

A 2006 University of Oregon graduate with roots in Salem and Monmouth, Paraskevas “brings an inquisitive mind and go-getter attitude” to the job, Irvine said. “He is quick to see connections and understand what people need.”

Irvine said he got the idea to foster farm innovation among area farmers after talking to tech companies about business opportunities in Independence.

“We talked to a lot of tech companies and asked what they wanted to try out here,” Irvine said. “We kept hearing, ‘Hey, we are interested in agriculture, but we don’t know any farmers.’”

“We said, ‘Well, gee, we are a small town. We know a few farmers. Let’s see if we can make something happen here,’” Irvine said.

(Continued on page 4)
Who We Are
OSU Extension 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.

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Who We Are
Polk Soil & 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.

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Calendar of Events
Polk SWCD and OSU Extension Polk County

March
06 – Luckiamute WC Board Meeting: 7pm TBD
call 503-837-0237 for more
13 – Glen Gibson WC Board Meeting: 5:30 pm
Salemtowne Breezeway call 503-623-9680
14 – Polk SWCD Strategic Planning and Board Meeting: 5 pm NRCS Meeting Room
20 – 4-H Cloverbud class – Sewing & Show-n-Tell
4:30-7:00pm, 503-623-8395
20 – Polk SWCD Board Meeting: 6 pm NRCS Meeting Room
25 – Rickreall WC Board Meeting: 1pm Delbert Hunter Arboretum, Dallas call 503-623-9680

April
03 – Greater Yamhill Watershed Council Board Meeting: 6pm McMinnville Library.
05 thru 26 – Extension Woodland Management
10 – Glen Gibson WC Board Meeting: 5:30 pm
Salemtowne Breezeway call 503-623-9680
11 – Rural Living Basics workshop. 5:45pm-8pm at Polk County Extension Office 503-623-8395
11 – Polk SWCD Board Meeting: 6 pm NRCS Meeting Room
12 – Luckiamute WC Board Meeting: 7pm TBD
call 503-837-0237 for more
17 – 4-H Cloverbud class – Natural Resources & Engineering 4:30pm, 6-7:00pm, 503-623-8395
25 – 4-H Terrarium & Houseplants workshop
5:00-6:30pm, 503-623-8395
26 – Rickreall WC Board Meeting: 1pm Delbert Hunter Arboretum, Dallas call 503-623-9680
30 – OWE SMALL GRANT WINDOW OPEN

May
01 – Greater Yamhill Watershed Council Board Meeting: 6pm McMinnville Library.
03 – 4-H Leader’s Association Meeting, 6pm at Polk County Extension, 503-623-8395
08 – Glen Gibson WC Board Meeting: 5:30 pm
Salemtowne Breezeway call 503-623-9680
09 – Polk SWCD Board Meeting: 6 pm NRCS Meeting Room
10 – Luckiamute WC Board Meeting: 7pm TBD
call 503-837-0237 for more
11 & 12 – Polk County Master Gardener Plant Sale at Polk County Fairgrounds
14 – OWE SMALL GRANT CLOSE
15 – 4-H Cloverbud class – Art 4:30-5:30, 6-7:00pm 503-623-8395
16 – 4-H Container Vegetables Workshop, 6:30 - 7:30pm 503-623-8395
16 – Budget Committee Meeting: Polk County Fairgrounds 6pm
24 – Rickreall WC Board Meeting: 1pm Delbert Hunter Arboretum, Dallas call 503-623-9680
28 – Memorial Day, OSU Extension Office CLOSED

June
05 – Greater Yamhill Watershed Council Board Meeting: 6pm McMinnville Library.
12 – Glen Gibson WC Board Meeting: 5:30 pm
Salemtowne Breezeway call 503-623-9680
12 – 4-H Color Spots (flower planting) workshop, 6:30 - 7:30pm, 503-623-8395
13 – Polk SWCD Board Meeting & Budget Hearing: 6 PM Polk County Fairgrounds
14 – Luckiamute WC Board Meeting: 7pm TBD
call 503-837-0237 for more
19 – 4-H Cloverbud Class – Pet Rock & Record Books 4:30-5:30, 6-7:00pm 503-623-8395
28 – Rickreall WC Board Meeting: 1pm Delbert Hunter Arboretum, Dallas call 503-623-9680

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. Editor, Mitch Lies

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Farm Innovation:  
(Continued from page 1)

The hope, Irvine said, is that a tech company will choose to locate in Independence, creating jobs and a boost for the local economy. Outside of that, the effort could translate into improved profits for area farmers, which also will help the local economy.

At its most basic level, farm innovation has become a mainstay on U.S. farms. Most farmers today, for example, have yield monitors that provide up-to-the-minute readings of yields as they maneuver combines through a field, and automatic steering, which helps when planting, treating and harvesting crops.

Many farmers also utilize more evolved innovations, including software that can measure water stress or pest stress in a crop, and apply inputs as required, a form of innovation known as precision agriculture.

While much of farm innovation is occurring in the private sector, Oregon State University is intricately involved in advancements, focusing more on reading the data the innovations are producing, said John Talbott, assistant director of the university’s Agricultural Experiment Station.

“Typically, the people who are putting that equipment out there, they can’t tell you what that image means,” Talbott said. “We spend a lot of time on that.

“Also, in a place like Oregon where we have over 220 crops produced, we don’t have a good handle yet in terms of having a repository of all the data,” Talbott said. “You need some place for that data to come and be stored so that as we get more of it, we can better refine how to use it.”

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**Become Involved in Extension Advisory Network**

People interested in getting involved with the Polk Extension Citizen Advisory Network (PECAN) are asked to contact the Polk County Extension office.

PECAN’s purpose is to advise Oregon State University’s Polk County Extension Service, the Extension District Board of Directors (Polk County Commissioners) and the Extension District financial officer on how resources are allocated and people are served in the county, as well as to advocate on behalf of the OSU Extension Service in Polk County.

PECAN’s Advisory Role is to:
- Provide advice on current needs, future trends, program priorities, and resource development and allocation for serving Polk County citizens, businesses, and organizations.
- Serve as liaison between OSU Extension Service, elected officials, local communities and organizations to increase partnerships, improve relationships, and leverage efforts for current and future education programs.

PECAN’s Advocacy Role is to:
- Advocate and build support for Extension programs and related budget and fundraising with county commissioners and other elected officials, state and local organizations, businesses, and individuals.
- Coordinate with OSU Outreach and Extension Service statewide efforts.

PECAN’s Membership are people who support OSU Extension Service’s mission and related programs and represent the diversity of Polk County citizens, communities, and organizations.

**Active History**

PECAN continues an active history of citizen-based advisory groups in Polk County.

The enabling Oregon State statues that set up Extension in Oregon recognized the need for locally driven programs through the use of advisory groups. Over the years, Polk County has used local landowners, homemakers, 4-H leaders, and Master Gardeners in various types of advisory groups to identify needed programs to address priority interests. With the establishment of the OSU Extension Polk County Service District, PECAN was created to continue this advisory and advocacy role.

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**Publication Documents Polk County Water Resource Development**

This 15 page publication compiles information of early efforts of water development activities in Polk County. It describes irrigation, drainage and domestic water activities along with the landowners (farmers) involved. The information is extracted from Polk County Extension Service reports, various documentation from the Polk County Planning Division, and personal interviews with N. John Hansen.

Credit for the early water development systems in the county were due to hard work by volunteers who worked with Oregon State University Extension agents, and often faculty. Copies of the publication are available from the OSU Polk Extension Service and Polk Soil and Water Conservation District offices. The publication was compiled by Walt Schroeder, retired OSU Extension agent and Jim Clawson, retired University of California range management specialist.
Mid-Valley Small Farms Team Turns to Strawberries

By Victoria Binning,
OSU Extension, Agriculture Program Coordinator

What’s new on the horizon for the Mid-Valley Small Farms team? After kickstarting an Oregon olive research project that will encompass propagation, potting and cultivar evaluations, the team is turning now to strawberry production. This Research and Extension program, supported by the Oregon Strawberry Commission, will focus on organic and conventional, day-neutral strawberries for fresh market.

Previous studies in the Pacific Northwest have focused primarily on June-bearing strawberries. However, day-neutral cultivars such as Albion and Seascape have a longer harvest season than June-bearing cultivars, such as Hood, Tillamook and Totem, which makes them a practical and profitable choice for fresh market production. While processed berries currently make up a larger share of the market in Oregon, there is a growing demand for locally produced fresh organic fruit. Thus, the time is ripe to develop production system guidelines and best practices for farmers in Oregon wanting to grow strawberries for fresh market.

This project will cover a wide range of topics, including the production of organic strawberry plugs, season extension technologies, such as high and low tunnels, nutrient management, intercropping with cover crops, and strawberry cultivar evaluation. Of particular interest, some of the demonstration plots will utilize soil solarization as a means of pre-plant soil preparation and may incorporate native species into the cover crop mix. The project hopes to determine possible benefits of using these practices for rotation and intercropping.

But it is not all research around here. The Mid-Valley Small Farms team wrapped up its first full year in stride. In 2017, the Mid-Valley Small Farms team hosted 11 workshops, one 8-week beginning farmer training course, one field day, and participated in numerous community events to address the needs of small farmers in our communities, in both English and Spanish. Over 350 people participated in educational workshops and events hosted by the Mid-Valley Small Farms Program. 2018 has already seen our most popular workshops to date: Blueberry Pruning and Tree Fruit Nutrient Management. And we’re continuing to grow! Efforts to conduct a needs assessment to tailor offerings to demonstrated needs of the farming community are currently underway.

Over the course of the last two months, while conducting our Mid-Valley Small Farms Program needs assessment, the Small Farms team has had the opportunity and privilege to visit and tour multiple small farms throughout Marion, Polk and Yamhill counties. These visits have been prime opportunities to learn about our local small farmers and gain valuable insight into our local farmers’ crop production methods, pest concerns, communication preferences and agricultural research ideas. Our conversations have been insightful and rewarding, and we are extremely grateful for those that have allowed us to pay them a visit and gain a glimpse into their farming operation. Ultimately, the results from this survey will provide the Mid-Valley Small Farms Program with the information necessary to create programming tailored to the needs of our small farmers for the next three to five years.

If you are interested in participating, wish to schedule a farm visit, or have additional questions, please contact Victoria Binning at victoria.binning@oregonstate.edu or (503) 373-3774.

Spring is a time for tulips, blossoming trees and of course, young lambs frolicking around the pasture. (Well what else did you expect an animal scientist to say?)

Lambing (the birth of lambs) is a critical time for sheep farms. It is the culmination of months of feeding and care for ewes. A vigorous, healthy lamb means the process was successful. Eighty percent of lamb losses occur during the first 10 days of life and good shepherd helps to reduce these losses. Lambs can suffer from starvation, hypoxia (lack of oxygen) due to a difficult birth, or low body temperature due to cold conditions.

Oregon State University Extension lambing schools began in 1984 at sheep operations in McMinnville and Turner. The Turner location was discontinued after several years but the McMinnville school continued. The McMinnville school ceased in 2010 due to low attendance. In 2012, the Oregon Sheep Growers Association expressed interest in starting the school again, and, in 2013, the OSGA/OSU lambing schools began the second phase of lambing school history at Mont Alto Ranch in Gilde, Ore.

So, what goes on at a lambing school? The school is held at a sheep operation during lambing time so the participants get the full lambing experience. It is limited to 15 students who range in both age and level of sheep experience. These “students” are treated to a combination of hands-on practices and sit-down discussion. Obstetrics, assisting the birth of lambs, is a primary part of the lambing school. Most ewes deliver lambs with no problems, however, sheep can have multiple offsprings ranging from two to five in number. Therefore, there is a greater chance for one lamb not to be aligned correctly and have difficulty being born. Participants learn techniques to solve these problems quickly to increase the number of lambs born alive and healthy.

Other hands-on practices are vaccinations, condition scoring, “tubing” a lamb (giving it milk when it is too weak to nurse) and the proper way to hold sheep. Discussion portions of the school cover lamb survival, sheep health and nutrition.

At the end of the day, participants are tired and a little dirty, but happy. Feedback from our most recent lambing school evaluations were “Great life skills and lessons!” “Excellent course.” “I feel that I have an arsenal of information to take with me back to my lambing.”

Yes, we had a lambing school. And it was fun!
Polk SWCD Helping Control Invasive Plants

By Lucas Hunt
Polk SWCD, Stewardship Forester

and Graham Evans-Peters
USFWS Refuge Manager

The Willamette Valley is estimated to have lost approximately 60 percent of emergent wetland to agriculture and development. To mitigate these losses, the United States Fish and Wildlife Service began an extensive wetland restoration program across the Willamette Valley National Wildlife Refuge Complex (Ankeny, Baskett Slough, and William L. Finley refuges) in the mid-1990s. This program ran for about 10 years, and at the 2,500-acre Baskett Slough National Wildlife Refuge (NWR) it resulted in the creation of over 550 acres of managed seasonal wetlands.

These plant communities provide large amounts of food — namely seeds, invertebrates and aquatic vegetation — that support tens of thousands of wintering waterfowl, waterbirds, shorebirds and numerous other wetland dependent species. Along the Willamette River, most of the historic seasonal wetlands were made up of plants that depended on frequent, natural floods. Without the large floods of the past, managers keep the refuge ecosystems healthy by using tools, such as water control, discing, herbicides and sometimes fire to recreate disturbance. Baskett Slough also contains upland habitats, including Oregon white oak prairie and woodland, and croplands managed for wintering geese. It supports over 200 species of birds, is important habitat for dusky Canada goose, and is home to six threatened or endangered plants and animals.

Invasive species severely impact the ability of refuge staff to manage habitats for benefit to native plants and animals. This is because invaders aggressively compete for space and resources in high disturbance ecosystems like the wetlands at Baskett Slough. This means refuge staff has to be constantly monitoring for non-native plants and animals.

In summer 2016, waterprimrose (Ludwigia hexapetala) was discovered in two of the six managed wetlands at Baskett Slough. Staff at the U.S. Fish and Wildlife Service immediately reached out to the

Polk SWCD to see how we could work together to control the floating, invasive plant. This plant is native to Central and South America, where it grows in swappier regions, such as those of lakes, pond, and other areas of slow, stagnant water. It has lance-shaped, alternate leaves, and a distinct yellow flower. The plant reproduces from root and stem fragments, meaning it can easily be transferred from one body of water to another by birds, animals, or careless recreationists. Waterprimrose tends to form wide, dense mats up to three feet deep, which easily displace native plants. These mats clog waterways, interfere with flood control and drainage systems, and impact oxygen levels in the water column. The plant has been used as an ornamental in water gardens and aquariums, which is likely how it came to Oregon. It is widely spread along the Willamette River from Eugene downstream, with multiple groups and agencies working to control it. At this time, its known distribution in Polk County is limited to the mainstem Willamette, as well as sloughs and mouths of tributaries to the Willamette.

Together, Polk SWCD and the USFWS staff applied for Oregon State Weed Board funds in December 2016 to pay for surveys and treatment of waterprimrose in 2017. Unfortunately, the 2016 application cycle was highly competitive and the grant proposal was not funded. After receiving feedback from the Oregon Department of Agriculture (ODA), a partnership formed among the three groups, along with a plan to conduct an initial treatment in 2017.

The ability of the refuge’s staff to control water levels in the wetlands at Baskett Slough makes survey and treatment of waterprimrose much easier. Last summer, Cackler and Dusky marshes were allowed followed by a six- to nine-person contract crew that carried backpack sprayers and gridded out the remaining areas of the wetlands for the smaller patches and individual plants growing among the native species. Finally, after the first rounds of herbicide had begun to show effect, a contracted ATV with a tank and wand quickly revisited all of the treated areas to ensure no plants had been missed. Using the base maps, refuge staff surveyed for untreated plants through the month of September and caught a few loosestrife plants, but no waterprimrose.

Be sure to follow up in the next issue of Cultivating to learn what the SWCD and USFWS are doing to ensure waterprimrose is not spreading in Mud Slough and Polk County. Waterprimrose identification, specifics about habitat, and what time of year to be on the lookout will also be discussed.
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Ag Water Quality Plans Driven by Local Stakeholders

Water quality, streamside restoration, pollinator habitat: It is practically impossible to work in any form of agriculture in the State of Oregon and not be exposed to these terms, and their accompanying rules and regulations, on an almost daily basis. More importantly, many of these issues that are currently in the spotlight have spurred the writing of new legislation that could ultimately result in more fines and penalties for agricultural entities and landholders that fail to adhere to the rules, but particularly those that relate to ag water quality. But, watersheds are dynamic and highly diverse throughout the state, so who is it that actually determines what the rules are for one area versus another? And, who determines what the biggest problems in terms of ag water are in those individual areas?

To find the answer to this question, we must first go back to 1993 when the Oregon Legislature passed the Agricultural Water Quality Management Act, which directed Oregon Department of Agriculture (ODA) to develop plans that would help mitigate water pollution and soil erosion from agricultural activities in order to eventually achieve water quality standards. In 1995, Senate Bill 502 was passed to clarify that ODA will regulate agricultural activities with regard to water quality. Since 1997, ODA has been working with local partners to develop Area Plans, and the associated Area Rules, in a total of 38 watershed-based Management Areas throughout the state. The purpose of these Area Plans and Area Rules is to identify local strategies and solutions that will prevent and control water pollution from soil erosion, or agricultural activity, on agricultural and rural lands statewide.

For each of these Management Areas, the director of ODA, appointed a Local Advisory Committee with as many as 12 members to aid in the development and biennial reviews of the local Area Plan and Area Rules. LACs are typically composed of agricultural landowners in the management area that reflect a balanced variety of agricultural interests. While the LAC itself is not a regulatory entity, they serve an advisory role to the director of ODA, as well as to the Board of Agriculture. While the provisions of an Area Plan do not establish legal requirements or prohibitions, each Area Plan is accompanied by Area Rules that describe local agricultural water quality regulatory requirements. In terms of enforcement, ODA exercises its regulatory authority for the prevention and control of water pollution from agricultural activities under the Ag Water Quality Program's general rules (OAR 603-090-0000 to 603-090-0120) and under the Area Rules for determined for a Management Area.

So, what does all of this actually mean in terms of development and enforcement of agricultural water quality rules? This means that local input is not only highly important, but is often the leading factor in determining local Area Rules! Not only that, local input is highly sought by both ODA and the LACs around the state! While one must be appointed to serve on the LAC for their management area, LAC meetings are open to the public, and will contain a public comment period specifically allocated for any comments. So, if you have constructive comments or concerns regarding agricultural water quality issues in your area, research your local Management Area and its LAC, go to a meeting, and get involved!

Land Management Problems?
Do you own or manage a small farm, woodland or wildlife acreage in Benton, Polk or Yamhill Counties?

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- Culvert replacements
- Plant or animal pest management
- Noxious weed control
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Application Windows offered Quarterly in 2018:

- 4/30 - 5/14
- 7/30 - 8/13
- 10/29 - 11/12

Sponsored by: The Polk, Benton and Yamhill SWCDs, Confederated Tribes of Grand Ronde, and the Luckiamute, Greater Yamhill, Glen Gibson and Rickreall Watershed Councils.

Small Grant Team Contact
Marc Bell: 503-623-9680 x 103 • Marc.bell@polkswcd.com
Have you wondered why some folks spend time and energy concerned with plants that are right along a creek or ditch? Why focus on vegetation that is of little or no direct economic benefit? Well, let’s look at a few reasons.

First, all the plants along a waterway have special characteristics that allow them to survive there and not be washed away. Plants in that zone protect adjacent fields from the erosive forces of a creek as it rises with increased rainfall. Their root mats not only hold soil but store water in their tissues. In some species, water taken up during a wet period is later released into the upper soil layers through a process called hydraulic uplift. In effect, the plants are watering the soil.

Second, healthy and vigorous plants growing in a streamside area prevent the area from being overtaken by noxious weeds like Himalayan blackberry or reed canary grass. Bare ground or areas with sparse vegetation are more likely to be occupied by weeds especially where moisture is abundant. This is certainly true in Western Oregon where we see green-up of weeds on a sunny winter day. Beating the weeds by ensuring that desirable plants are growing makes good sense. Preventing any part of your acreage from being a source of weeds for you or your neighbors is a big time-and money-saver. Deeply rooted plants which also have a large canopy to provide shade also help with out-competing sun-loving weeds.

Other benefits relate to the physical properties of soil itself. At the beginning of the rainy season, dry clay soils are slow to allow water infiltration. Once wetted, however, clay soils hold onto their water longer than coarser, sandier, soils. Fields that have a cover crop have greater rates of water infiltration and thus prevent erosion as a storm continues and soils move beyond their saturation point.

This illustration shows the benefit of a cover crop or field margin planting. In winter when we receive most of our rainfall, the presence of the plants, whether they will later be harvested or not, holds fine sediments and debris. The vegetation is acting like a filter.

Along stream banks, where soil may be sloughed into the water or where it is not practical to use farm equipment, it often makes sense to plant perennial plants. Those plants change the physical properties of the soil, as described above, and can host insects which are predators of crop pests or pollinators for broadleaf herbaceous crops and vines.

Finally, it is possible to be paid for doing a good thing! Farmers who participate in the Conservation Reserve Enhancement Program (CREP) are be paid an annual rental rate for planting resource conserving plant species in areas which are high priorities for conservation. If crop or pasture acreage is enrolled in a CREP easement, a farmer is paid for the guarantee of keeping that perennial vegetation healthy including controlling weeds. Good things take time, so think on a 10-15 year timeframe for these high impact management actions. For more information, read Marc Bell’s article “Native Riparian Areas Management.”
Groundwater Awareness: Test. Tend. Treat.

By Chrissy Lucas
OSU Extension, Well Water Program Coordinator

Just as you check your furnace or smoke detector batteries seasonally, spring is a good season to have an annual water well checkup before the peak water use season begins, according to the National Ground Water Association (NGWA).

Why is it a good idea to have my water well checked annually?

An annual checkup by a qualified water well contractor is the best way to ensure problem-free service and quality, safe to drink water.

Also, preventative maintenance usually is less costly than emergency maintenance, and good well maintenance — like good car maintenance — can prolong the life of your well and related equipment. NGWA further recommends you test your water whenever there is a change in taste, odor, or appearance, or when the system is serviced.

The OSU Extension Service also recommends having a well test done every 1 to 3 years or after a major weather event (ex: flooding). Coliform bacteria tests have to be done at a private lab, and your local office has a list of certified labs serving the area. FREE nitrate screening is available at the OSU Polk, Benton, and Linn County Extension offices Monday through Friday 8 a.m. to 5 p.m. Bring a ½ cup of untreated water in a clean container; be prepared to leave to sample (and sample container) if staff is away from the office.

Schedule your annual water well checkup

Wells can provide high-quality drinking water, and about half the U.S. population receives its drinking water from wells. But with well ownership comes the responsibility of keeping the well well in good working order. A check of your well by a qualified water well contractor may include:

- A flow test to determine system output, along with a check of the water level before and during pumping (if possible), pump motor performance (check amp draw, grounding, and line voltage), pressure tank and pressure switch contact, and general water quality (odor, cloudiness, etc.).

- A well equipment inspection to assure it’s sanitary and meets local code.
- A test of your water for coliform bacteria and nitrates, and anything else of local concern. Other typical additional tests are those for iron, manganese, water hardness, sulfides, and other water constituents that cause problems with plumbing, staining, water appearance, and odor.

As a reminder, we also recommend that well owners:

- Keep hazardous chemicals, such as paint, fertilizer, pesticides, and motor oil far away from your well, and maintain a “clean” zone of at least 50 feet between your well and any kennels and livestock operations.
- Maintain proper separation between your well and buildings, waste systems, and chemical storage areas.
- Periodically check the well cover or well cap on top of the casing (well) to ensure it is in good repair and securely attached. Its seal should keep out insects and rodents.
- Keep your well records in a safe place. These include the construction report, and annual water well system maintenance and water testing results.

For more information, call Chrissy Lucas, Groundwater Protection Education Program Assistant, 541-766-3556 or Chrissy.Lucas@oregonstate.edu

Rural Living Basics Class on Wells and Septic Systems

To learn more about your drinking water well and septic system to protect your family and animal’s health, your property investments, and the safety of the groundwater resource, plan to attend one of the upcoming FREE Rural Living Basics classes.

Each class is free and open to all. However, pre-registration is appreciated due to classroom space constraints. To register, call Chrissy at (541) 766-3556 or send email to Chrissy.Lucas@oregonstate.edu.

- Wednesday, April 11th, 2018 from 5:45 PM - 8 PM at the Polk County Extension Service Auditorium, 289 E Ellendale Ave Suite 301 in Dallas
- Monday, April 16, 2018 from 6:15 PM - 8:30 PM at the Corvallis-Benton County Library Main Meeting Room, 645 NW Monroe Ave in Corvallis

Participants in either the class or a community clinic may have their water screened for nitrate by bringing about 1/2 a cup untreated well water to class in a clean, water-tight container. Nitrate has been associated with a type of blue-baby syndrome, and there are emerging concerns about additional health problems associated with nitrate in drinking water. The areas at greatest risk for high nitrate in the Willamette Valley are those with well-drained soils on the valley floor. All homes with private wells should be actively monitored for nitrate levels.

For additional information on well water and septic systems, other free Rural Living Basics classes, and nitrate screening events visit the OSU Well Water website at http://wellwater.oregonstate.edu or for more information call 541-766-3556.
What’s New in Polk County 4-H?  By Susan Busler, OSU Extension, 4-H Youth Development

Polk County 4-H has many opportunities for youth and adults of all ages. 4-H is more than the traditional 4-H Club that meets each month. We also offer STEP classes (Short Term Educational Programming) that are far-ranging, depending on the skills of our staff, leaders and volunteers. These classes provide everyone involved a chance to learn and experience new activities without requiring a large time commitment.

These classes are generally open to youth of all ages K-12, and you don't have to be in 4-H to participate. The younger youth participate in the hands-on learning activities, while the older youth have the opportunity to be involved in leadership roles, teaching and helping younger youth. Adults are always needed as volunteers, teaching such project areas as sewing, cake decorating, woodworking, outdoor education, art and leathercraft, to name a few. If you have an idea for a STEP class, call the Extension Office and we will explore the possibilities.

Our ever-popular Spring Break classes are STEP classes that are held daily during school spring break. They feature topics from cooking and baking to horticulture to outdoor education. This year’s classes are already full, but keep an eye on our website and Facebook page for more classes to be scheduled as the spring and summer progress! We will be planning horticulture and outdoor education classes!

COUNTRYWIDE CLOVERBUD CLASSES

The Countywide Cloverbud Classes are meeting on the third Tuesday of each month. The Cloverbud classes are for youth in K-3rd grade. Due to the popularity of these classes they meet from 4-5:30 p.m. and then repeat the same class from 6-7:30 p.m. We have a wide variety of leaders helping with lots of exciting ideas. All projects and activities completed are appropriate to be exhibited as Cloverbud Display at the Polk County Fair or entered into the open class youth division.

What will the Cloverbuds be doing in the next months?
March 20th - Sewing and Show-n-Tell;
April, 17th - Natural Resources and Engineering;
May 15th – Art;
June 19th - Pet Rock and Record Books;

If your child would like to attend, preregistration is required. Call the Extension Office at 503-623-8395. Most classes will be $2 for 4-H members and $3 for non-members.
Food Hero Recipe Tastings: Sampling healthy meals at local food banks

By Carly Kristofik
OSU Extension, SNAP Ed Program Coordinator

It’s 9 o’clock on a brisk, Monday morning in Dallas when Christopher Scadden arrives at the Dallas Emergency Food Bank ready to transform into a Food Hero. After donning his Food Hero apron and cape, he sets up his tasting station and begins to prepare this month’s tasting, Food Hero’s very own Tuna Quesadilla. As patrons start to filter into the pantry waiting area, Chris greets and encourages them to try today’s featured recipe.

Christopher’s work is part of Oregon State University (OSU) Extension’s Family and Community Health (FCH) program, specifically the Supplemental Nutrition Assistance Program Education (SNAP-Ed). His work entails collaborating with community partners within Polk County to promote healthy food choices and increased physical activity for limited-resource populations.

He is currently hosting Food Hero recipe tastings, which are a component of OSU Extension’s Food Hero Social Marketing Campaign. Recognized nationally, Food Hero aims to increase fruit and vegetable consumption for limited-resource populations through interactive community engagement and fostering positive changes where people live, work and play. The Food Hero website (foodhero.org) is a wonderful resource for local communities, providing a bountiful supply of healthy and tasty, low-cost recipes, shopping tips and community strategies that may be utilized to improve fruit and vegetable consumption in a variety of settings.

Working with the Marion-Polk Food Share (MPFS), Christopher has been transforming into a Food Hero at multiple food banks across Polk County since the beginning of 2017. Many food banks receive a variety of fresh produce regularly, in addition to excellent shelf stable options such as canned beans and tomatoes. Sometimes the items patrons receive may be new and unfamiliar to them.

During the monthly recipe tastings, Christopher prepares a Food Hero recipe utilizing healthy ingredients available at local food banks. Through these demonstrations, he individually brainstorms with patrons about ways they can transform the ingredients they receive into healthy, simple meals. Through his work, Chris has formed positive relationships with pantry managers and patrons. Frequently, patrons share with Chris their experiences trying recipes at home, and ask him what distribution he will be at next. Chris feels like an integral part of pantry operations, being warmly welcomed by pantry managers and volunteers and being invited to participate and attend other events in the community.

On this Monday morning, the Tuna Quesadilla isn’t the easiest sell and is met with some skepticism. Chris encourages patrons to try it and provide their feedback. One-by-one, they take a bite, and a look of surprise washes over their faces. Overwhelmingly, people are surprised that it tastes so good and has so much flavor with only five ingredients. As the distribution slows down and patrons filter out, they carry away their food boxes, this month’s Food Hero recipe, and healthy meal ideas.

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Win-Win with CREP on Low-Production Lands

By Marc Bell
Polk SWCD
Resource Conservationist

Are you producing a crop on your property and not getting meaningful production from the area adjacent to a stream that flows through (or at the edge of) your property? If so, there are alternative ways to make that land produce income for you, without changing your overall crop or spending excessive efforts ensuring profitable production on marginal land. Producers do not need to fight the stream bank’s wet and soft soils that can break away in winter high flows, or worry about clearing weeds introduced from upstream likely to take hold on the banks and infiltrating crops fields. Consider the CREP program, the Conservation Reserve Enhancement Program, offered by the Farm Service Agency and the USDA through the Polk SWCD.

The CREP program will augment your stream bank and provide you with the technical guidance and reimburse you for the costs of establishing native vegetation buffer around waterways on your property. CREP reimbursements significantly reduce the costs of establishing this buffer, which will stabilize the stream bank and attract pollinators. The FSA rents the land inside the buffer at a competitive rate for both irrigated and non-irrigated lands. Once established, these riparian buffers require very little maintenance to maintain; landowners reap the benefit of a predictable renter and the peace of mind that their stream bank will hold and flourish with helpful vegetation and fulfills the Oregon Department of Agriculture’s requirements on streamside vegetation, all while being compensated by FSA for that land that was likely a low-yielding area and not worth the additional labor and expense to maintain as commercial growing land.

The CREP program can also be tailored for producers who pasture animals on their property, as well. Your CREP plan can be designed to provide all the above mentioned benefits as well as offset the costs of constructing livestock crossings, fencing and water facilities. These additional practices prevent animals from damaging sensitive stream bank soils, reduce potential animal injury and maintain a higher water quality level, all without eliminating the stream as a source of water for livestock.

A healthy native riparian buffer ensures your stream bank and stream channel stay where they are and prevents you from losing productive land to erosion, offering predictability for future management as well. CREP buffers provide a native source of nectar for pollinators to visit your property, and more ideal food sources for local wildlife to graze than your commercial crop as a side benefit. These natural areas can attract opportunities for hunting on your own property as well. Native vegetation in the valley are mostly perennial plants, they don’t require yearly replanting or much effort once they’ve become established, further reducing long-term maintenance costs compared to low yields of commercial crops in these areas.

If any of these situations seem similar to challenges you are facing on property you own or manage, please contact the Polk Soil and Water Conservation District at 503-623-9680 and ask for Marc Bell and the CREP program. We’ll schedule in a time to talk about what the CREP program might look like on your property as soon as we can. Enrollments are open all year and you can get started anytime you like.

Polk SWCD Among State Weed Board Grant Recipients

By Mitch Lies CULTIVATING Editor

The Polk Soil and Water Conservation District has received a State Weed Board grant for weed control and monitoring in Basket Slough.

Specifically, the grant, for $14,736, is for control and monitoring of Ludwigia hexapetala, or waterprimrose, which in 2016 was discovered in two of the six managed wetlands at the slough. Polk SWCD is working with the U.S. Fish and Wildlife Service on managing the weed.

In all, the state awarded $1.84 million to 63 projects in the latest round of weed control grants. The grants are designed to fight invasive, noxious weeds in Oregon. The money will assist programs and organization around the state in the battle against the weeds.

Breaking down the funding, 49 projects were funded at a total of more than $1.4 million as part of the regular grant program. In addition, the board funded separate projects at $401,000 from a newly available county weed grant program.

Tristen Berg, the Oregon Department of Agriculture’s Noxious Weed Grant Program coordinator, said the grants are vital to helping county weed programs, many of which have had their budgets reduced in recent years.

According to studies, invasive weeds pose significant economic threat to Oregonians. The economic impact of just 25 of Oregon’s worst noxious weeds reduce Oregonians’ personal income by approximately $83.5 million per year, according to an Oregon Department of Agriculture press release.

The Weed Board grants often are used to leverage other funds in the battle against noxious weeds.

Projects funded in this cycle include some that focus on early detection and rapid response to noxious weeds new to Oregon or in limited distribution, and funds to fight weeds that are more abundant, but in need of control.
Taking Care of Your Woods: Some Opportunities to Learn

By Brad Withrow-Robinson OSU Forestry & Natural Resources Extension agent for Benton, Linn and Polk Counties.

OSU Extension and its partners offer local landowners a variety of ways to learn about your woods. We have a half-dozen events within a short drive this spring.

The Basic Woodland Management Shortcourse is ideal for anyone who is just starting out taking care of a woodland property, providing a broad introduction to woodland ownership. It is offered in four evening sessions with a Saturday fieldtrip. Topics covered include:
- Getting Started: Assessing your property and site
- What's Going on in Your Woods? Understanding tree biology and forest ecology
- Taking Care of Your Woods: Tree planting, care for an established forest, weed control
- Getting it Done: Safety, timber-sale logistics, and laws and regulations.

Oregon Season Tracker (OST) is a citizen science program that gathers information about local weather and seasonal changes. The data collected by OST volunteers helps scientists here in Oregon and elsewhere fill gaps in data and expand the scope of their research, while contributing to the understanding of forest ecology and accuracy of weather forecasting.

Woodland Information Night is offered each year by the Small Woodlands Association. This year's session in Corvallis will feature three speakers talking about “Managing for wildlife and diversity.” For those wondering what forestry will look like in 30-40 years, the 2018 Starker Lecture Series will explore this and ask some of our current leading thinkers to consider what the economic, political, technological and ecological future might look like.

Folks with a young stand of trees between 5 and 15 years old likely are, or should be wondering if the trees have room to grow with vigor and resiliency until they reach the size for a thinning harvest, typically around age 25 to 30. We are holding a Thinning Young Stands Field Workshop across the river in Marion County. The workshop features Douglas-fir stands showing results of earlier thinning along with younger plantings needing attention in a low-elevation Willamette Valley tree farm. You will learn how to assess the current spacing and condition of your trees and likely outcomes — with and without thinning — to help you weigh the options, depending on your goals. For details on these events, see below. More is on the way, so be sure to check my website http://extension.oregonstate.edu/benton/forestry/events for information about other events in the area.

Oregon Season Tracker citizen science training
Oregon Season Tracker is a Hybrid class, meaning participants take an online training at home, and then attend a local classroom session for skill-building and Q&A.

OST Online Spring Training: Opens March 1, 2018 (2-3 hr. work on your own schedule).
Local OST skills building session:
Date: March 15
Location: Dallas
Time: 6-8 PM
Cost: $40 per individual or family sharing materials. Includes program-approved rain gauge.
To register or find trainings in other parts of the state (Lincoln, Washington and Lane Counties) visit the OST website (http://oregonseasontracker.forestry.oregonstate.edu/)

Starker Lecture Series 2018
Forestry in the Age of Artificial Intelligence
Zack Parisa, President and co-founder Silvia Terra
Date: Wednesday, March 14
Time: 3:30 pm
Location: La Sells Stewart Center-C&E Hall
Or, watch the lecture in a live video stream here http://live.oregonstate.edu

Basic woodland management Extension will be offering the ever-popular Basic Woodland Management Shortcourse this April in Dallas.
Dates: Thursday, April 5, 12, 19, & 26.
Time: 6 to 8:30
Location: OSU Extension office
Field Trip Saturday, April 28.
Cost is $50 for an individual, $60 for two from the same family sharing materials. Registration required by March 27. Call Benton County Extension 541-766-6750 or email jody.ename@oregonstate.edu

Thinning Young Stands Field Workshop
Date: Saturday, April 21
Time: 9:00 to noon
Location: North of Salem
Registration required by April 16.
Space is limited. There is no fee. Detailed directions will be provided to registered participants.
To register or get more information, call 503-655-8631 or email jeand.bremer @oregonstate.edu
The Basic Woodlands Shortcourse gives practical information about tending a woodland property.

Forest Advisory Committee Seeks Members

A committee advising Oregon Department of Forestry staff on forest operations, projects and activities is currently seeking applications to fill two vacancies.

Formed in 2001, the State Forests Advisory Committee provides input on the implementation of forest management plans in northwest and southwest Oregon. The committee represents a diverse range of forestry interests and serves as a forum to discuss agency opportunities for achieving forest management goals in these areas.

The committee specifically covers issues related to ODF district Annual Operations Plans, best practices for balancing a range of forest benefits, strategies for improving public outreach and participation, and other technical forest management topics.

The two new members will serve three-year terms beginning in April 2018. There is one vacancy for a position representing the environmental community and a vacancy in a non-affiliated position.

"This is an opportunity for Oregonians to get involved in today’s forestry conversation and provide insight and perspectives on how we are implementing the forest management plans. We look forward to hosting a diverse and experienced committee in the coming months," said Andy White, Northwest Oregon Area Director for the Oregon Department of Forestry.

SFAC members attend three meetings per year and a summer field tour, and agendas are usually scheduled from 8:30 a.m. to 3 p.m.

To apply, complete a questionnaire (http://www.oregon.gov/ODF/Working/Documents/SFACApplicationQuestionnaire2018.pdf) by March 19 and submit to April Davis at the Oregon Department of Forestry by email to april.r.davis@oregon.gov or mail to 801 Gales Creek Rd., Forest Grove, OR 97116.

For specific questions about the committee, please contact Andy White at 503-359-7496 or andrew.t.white@oregon.gov. Additional SFAC background information can be found here (http://www.oregon.gov/ODF/Board/Pages/SFAC.aspx).
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