



GROWING

Extending Knowledge and Changing Lives in Linn and Benton Counties

With Help from Extension, Oregon Leads the Nation in Christmas Trees

By Mitch Lies,
GROWING Editor

Routinely, Oregon leads the nation in Christmas tree production. Staying on top, though, hasn't been easy.

Oregon growers battle pests and diseases that attack Christmas trees throughout a tree's life cycle, and they contend with drought and high temperatures that can kill seedlings before they take root. Still, the industry brings to market upwards of 3 million Christmas trees annually, supplying more than a third of the nation's market and generating more than \$100 million in gross sales.

One key to Oregon's reign at the top has been the assistance the industry receives from Oregon State University Extension.

Other than a one-year lag, since 2008, OSU Extension has had a Christmas tree specialist in place to help growers address abiotic and biotic plant stresses that can play havoc on trees during the seven to ten years it takes to bring a Christmas tree to market.

"It is pretty critical for us," said Casey Grogan, a Christmas tree grower from Silverton who is co-chair of the Pacific Northwest Christmas Tree Association's Research Committee. "We have issues that we need to



Oregon leads the nation in Christmas tree production, annually bringing upwards of 3 million Christmas trees to market. Here a grower harvests trees by helicopter.

deal with, and we need a professional researcher to help us with them."

Grogan added that the industry "fought hard" to persuade OSU administrators

to replace former Extension Christmas tree specialist Chal Landgren, who retired in 2023, and that the industry was thrilled when Extension brought on Priya Rajarapu in 2024.

Rajarapu comes to OSU from North Carolina State University where she spent much of her time working in the university's Christmas Tree Genetics Program as an entomologist, biochemist, and molecular biologist.

At OSU, Rajarapu is spending less time in the lab and more time on the ground helping growers address production issues, as well as overseeing a Christmas tree seed orchard established by Landgren at the North Willamette Research and Extension Center (NWREC) in Aurora.

"The growers have been great," she said. "I feel very fortunate that I've been accepted into their community."

Production Issues

Among the biggest production issues that Pacific Northwest Christmas tree growers encounter today is seedling survival. "Seedling survival has become a huge problem," Rajarapu said. "During the 2021 heat dome, some growers recorded seedling losses of up to 80 percent."

During his time at OSU,



Priya Rajarapu was brought on by OSU Extension in 2024 to serve as the statewide Christmas tree specialist.

Landgren showed that spreading wood chip mulch around seedlings or adding sawdust to seedlings can help increase survival rates. Other research has shown that dipping seedling roots in polymer-based materials prior to planting can help seedling survival. These and other approaches to seedling survival continue to be investigated.

Oregon growers don't have as big of an issue with insect pests as other areas of the country, Rajarapu said, but pests like aphids, mites, and the Douglas fir needle midge can still pose production problems. And, according to Grogan, at times export partners will block shipments of Christmas trees because of the presence of a pest.

"We need to keep our trees moving, and as we cross borders, there are pests that people don't want, and we need to identify those pests

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Who We Are

The Oregon State University Extension offices in Linn County and Benton County offer practical, lifelong learning experiences. We sponsor conferences, workshops, demonstrations, tours, and short courses. We recruit, train and manage volunteers who assist us with community outreach and education. Our Extension faculty and volunteers answer questions and give advice by phone, in person, through e-mail, and on our Websites. We provide brochures and flyers with specific information on a variety of subjects. We are funded by a cooperative partnership between Oregon State University, the U.S. Department of Agriculture, and our local counties.

Office locations and hours

The Benton County office is located at 4077 SW Research Way in Corvallis. Office hours are 8 a.m. until 5 p.m. Monday through Friday. Telephone: 541-713-5000. <http://extension.oregonstate.edu/benton>.

The Linn County office is located at 33630 McFarland Rd (on the corner of Old Highway 34 and McFarland Road), in Tangent. Office hours are from 8 a.m. to 5 p.m., Monday through Friday. Phone 541-967-3871. <http://extension.oregonstate.edu/linn>.

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Oregon State University
Extension Service

Extension newspapers through the years

GROWING is an in-house bimonthly newspaper produced by OSU Extension in Linn and Benton counties.

The paper originated in 1983 as the *Extension and ASCS Bulletin* to highlight all of the various programs that Extension offered in one place, rather than producing multiple mail out newsletters. In December 1985 the paper became the Linn County *UPDATE* when ownership and publication was taken over by the Linn County Extension Association (LCEA), a non-profit advisory committee formed to promote Extension to the citizens of Linn County. The mission of the paper was to provide current news about the many programs in Linn County Extension. *UPDATE* newspaper was published monthly and remains the only continuously published paper of its kind in the United States.

In July 2014, the paper went through an overhaul. Given a fresh new look and name, *GROWING* began covering the news from both Linn and Benton County Extension offices. The paper also became a bimonthly publication. Issues are published in January, March, May, July, September, and November. *GROWING* created a wonderful opportunity for Extension to reach more people in both counties.

Laurie Gibson started her career with Linn County Extension in April of 1995. One of her primary duties was coordinating the monthly *UPDATE* newspaper. As the coordinator of *UPDATE* & now *GROWING*, Laurie synchronizes the timeline with faculty to submit articles, works with the editor for front page story ideas, and the layout person on content.



Extension staff and longtime GROWING wrangler, Laurie Gibson poses with the different variations of the Linn Extension paper through the years - from its earliest issue to the current joint publication of Linn and Benton Counties, the newspaper has been continuously in production since 1983.

Laurie does all the proofing, often rewriting for clarity or editing articles with author input, etc. She coordinates a team to come up with main page story ideas and follows each newspaper from start to end. She also makes sure the electronic copy is uploaded to our website. "Things have certainly changed a lot over the years. I used to receive copy from Extension faculty hand-written on a yellow legal pad and we trekked down to the DH to do our proofing on large proof sheets spread all over the conference room table - we had WAY more use for red ink pens back in those days! Today the entire process is mostly electronic from copy submission to proofing."

Each issue of *GROWING*

features a cover story and updates from all of the programs in Linn and Benton counties: 4-H Youth Development, Family and Community Health, Forestry and Natural Resources, Community Horticulture, Groundwater Protection Education, Field Crops, Livestock and Forages, Small Farms, and Tree and Small Fruits.

GROWING newspaper is printed and published in partnership with the *Albany Democrat Herald* and direct mailed to more than 4200 households in Linn and Benton Counties and is inserted into the print editions of the *Albany Democrat Herald* and *Corvallis Gazette Times*.



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Groundwater Protection Education

Septic System Additives: More Harm Than Help

Septic system additives are often marketed as miracle solutions to improve system performance, reduce odors, or break down waste more efficiently. However, according to the U.S. Environmental Protection Agency (EPA), these products are not only unnecessary—they can actually harm your septic system and the environment.

Why Additives Are Problematic:

- **Disruption of Natural Processes:** Septic systems already contain the bacteria and enzymes needed to treat waste. *Adding additives has been shown to interfere with the natural breakdown process, leading to clogs and system failure.*
- **Environmental Risks:** Chemical additives, such as degreasers and drain cleaners, can contaminate groundwater and damage soil structure. Some biological additives may alter the quality of treated wastewater, posing risks to nearby water bodies.
- **Limited Scientific Support:** Many products lack independent research to back up their claims. What's marketed as "natural" or "bioactive" may still contain unknown or harmful ingredients.

Better Alternatives: Instead of relying on additives, homeowners should focus on regular maintenance:

- Pump your tank every 3–5 years.
- Use water efficiently.
- Keep harmful substances out of your drains.
- Protect your drainfield from damage.

Before reaching for a septic additive, consider consulting a licensed septic professional. A well-maintained system doesn't need extra help; it just needs proper care.

For more information, visit epa.gov/septic.



Winterizing Your Well: Protect Your Water and Wallet

As winter approaches domestic well owners should take proactive steps to protect their water systems from freezing temperatures and costly damage. While many wells are built to withstand seasonal changes, cold weather can still pose serious risks, especially to exposed components.

Top Winter Tips for Well Owners:

- **Insulate Pipes and Pump Houses:** Exposed pipes are vulnerable to freezing and bursting. Use foam insulation or heat tape and ensure your pump house is properly sealed and heated. A small heat source can help maintain temperatures above freezing.



Check the Wellhead and Seal

Inspect your wellhead for cracks or gaps. A secure, undamaged cap prevents debris, insects, and surface runoff from contaminating your water supply.

- **Drain Outdoor Water Lines:** Shut off and drain exterior faucets, irrigation systems, and hoses. If your home lacks a shut-off valve, consult a local contractor for winterizing alternatives.
- **Monitor Water Quality and Pressure:** Seasonal changes can affect water clarity, taste, and pressure. If you notice anything unusual, it may indicate sediment buildup or pump issues—schedule a professional inspection.
- **Prepare for Power Outages:** Winter storms can knock out power, disrupting your well system. Keep a backup generator and fuel on hand and stock up on bottled water to ensure access during outages.

Bonus Tip:

Document your inspections and maintenance. Keeping a log with photos and notes can help track changes and support timely repairs.

By winterizing your well now, you'll avoid headaches later—and ensure safe, reliable water all season long.

For more resources, visit Wellowner.org.



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Help Linn Benton Food Share provide food for those in need in our community!

It's a critical time for all of us to support our neighbors. The United States is the wealthiest nation in the world. However, we still have community members that face hunger. What does that look like in Oregon? Around 1 in 7 adults and 1 in 6 children face hunger in Oregon. Currently, around 18 percent of Oregon's population receive SNAP (Supplemental Nutrition Assistance Program) benefits. These households consist of low-income working individuals and families with young children, the elderly and disabled. SNAP is proven to lift people out of poverty, while helping support the local economy and food producers.



The Mission of Linn Benton Food Share is to eliminate hunger in Linn and Benton counties. Linn Benton Food Share distributes food to more than 68 partner agencies, in addition to several direct service programs.

For those community members in need of food

Please use this comprehensive map created by the Oregon Food Bank to find free groceries, meals, or places to double your SNAP benefits. Visit foodfinder.oregonfoodbank.org

For those community members that have the resources to help

- MAKE food donations and GIVE your volunteer time directly to food pantries, gleaners, and meals sites.
- HOST a fundraiser or food drive.
- DONATE money directly to Linn Benton Food Share. The most effective way to help in the fight against hunger is to donate money. For every dollar donated Linn Benton Food Share can extend that dollar further. Money donations allow them to purchase large quantities of food that benefit their network agencies.

For more information, please visit communityservices.us/linn-benton-food-share/

Mushroom Coffee: Hype or Health?

By **Nikki Kelley**,
OSU Dietetic Intern 2024-26

Does this trendy brew really deliver the nutritional benefits of mushrooms?

What is Mushroom Coffee?

- If you've seen "mushroom coffee" at the grocery store or online, you may wonder whether this earthy brew lives up to the buzz. While the name may sound unusual, mushroom coffee is essentially a blend of traditional coffee beans with powdered medicinal mushrooms. Popular varieties include reishi, chaga, lion's mane, and cordyceps. These mushrooms are dried, extracted for their bioactive compounds, and then combined with regular coffee grounds.
- One appeal of mushroom coffee is its lower caffeine content, which may help reduce jitters or improve sleep. Because about half of the coffee is replaced with mushroom powder, caffeine content is often around 50 mg per 8-oz cup versus about 100 mg in regular coffee. Exact amounts vary by brand and process, but the flavor is often similar to regular coffee.

Benefits of Mushrooms

- Mushrooms themselves are nutritional powerhouses. For centuries, Chinese medicine has used mushrooms as 'adaptogens,' natural agents that help the body adapt to stress. They contain antioxidants like vitamins C and E, as well as natural plant compounds like polysaccharides and carotenoids, that help protect



the body from stress and damage. These have been linked to:

- Immune support and anti-inflammatory effects.
- Cognitive and mood benefits, particularly from lion's mane, which has shown promise for depression and stress reduction.
- Metabolic support, with species like cordyceps and lion's mane studied for antidiabetic, hypoglycemic, and hypolipidemic effects.

Does It Work in Coffee?

- The evidence is unclear. Most of the research on mushrooms involves whole foods or concentrated extracts, not mushroom powders blended into coffee. While adding cordyceps or lion's mane may slightly boost the mineral content of coffee, it's not clear whether the beneficial compounds survive processing and brewing in amounts that make a meaningful difference.
- While mushroom coffee combines the antioxidant effects of coffee and mushroom compounds, there's no guarantee it delivers the same health benefits found in studies of

mushrooms alone.

Whole Foods Win

- For better health, eating mushrooms in their whole-food form is still the most reliable choice. Whole mushrooms provide B vitamins, vitamin D, selenium, potassium, fiber, and a variety of antioxidants. As importantly, they offer nutrition synergy (the way nutrients interact together to enhance benefits), which is often diminished in isolated powders or supplements.
- Another consideration is cost. Mushroom coffee typically runs about twice the price of regular coffee. For the same price, you could buy plenty of fresh mushrooms to cook and enjoy in your meals.

Bottom Line

- Mushroom coffee is safe for most adults and may be worth trying if you enjoy experimenting with functional beverages or want to cut back on caffeine. When it comes to proven health benefits, whole mushrooms remain the better bet. Trendy or not, they deserve a regular spot on your plate.

References upon request.

Dietary Supplements: What You Need to Know

By Nikki Kelley,
OSU Dietetic Intern 2024-26

Dietary supplement labels and advertising of vitamins, powders, and pills may promise everything from stronger bones to sharper focus. These products can play a role in health, however, smart consumers need to know when they help, when they don't, and how to choose wisely.

What are Dietary Supplements?

- Dietary supplements include vitamins, minerals, herbs, amino acids, and other ingredients designed to complement or “supplement” your diet. They come in many forms, such as capsules, tablets, powders, drinks, and gummies. Some people use supplements to fill nutrient gaps (like vitamin D in winter months), while others look to them to improve performance, weight loss, or immune support.
- Supplements are regulated by the Food and Drug Administration (FDA), but not in the same way as medicines. Businesses don't have to prove a supplement works, or even that it contains what the label says, before it's sold. That's why an independent third-party for testing is so important. Companies that do third-



party testing confirm that what is on the label is in the supplement. Seals like NSF, USP, or Informed Choice on supplement labels confirm this review and quality of the product. Keep in mind, third-party testing will confirm that what is on the supplement label is in the product, but it has no control over the health claims the supplement is making.

Are Supplements Safe?

- For many people, supplements can help meet nutrient needs. Calcium and vitamin D support bone health, folic acid reduces the risk of birth defects, and omega-3s may benefit heart health. However, taking more is not always better. Taking high doses or combining multiple supplements can cause side effects or interact with medications. Always

check with your healthcare provider before starting something new.

- Dietary supplements can be helpful, but they are not one-size-fits-all. Think of them as a helper, not a ‘fix-all.’ First focus on a balanced diet, then talk with a healthcare provider before adding anything new, and always look for trusted third-party seals when buying dietary supplements.

Take home message

- Supplements are meant to add to a healthy eating pattern, not replace it. Eating a variety of foods is still the best way to get the nutrients your body needs. To learn more about what makes a healthy eating routine, the Dietary Guidelines for Americans and MyPlate are good sources of information.

Spotlight on Creatine!

One supplement that's generating buzz is creatine. Naturally found in small amounts in meat and fish, creatine also lives in your muscles, where it helps produce quick bursts of energy. Creatine supplements (most often creatine monohydrate)

provide much larger amounts than food alone.

Research shows creatine may improve strength, power, and recovery during short, high-intensity activities, such as sprinting or weightlifting. But it offers little benefit for endurance activities like

running cycling, or swimming. Creatine is generally considered safe for healthy adults, though it may cause water retention and mild weight gain.

Do adults who regularly exercise need extra creatine every day?

For most people, the answer

is no. If you're fueling with balanced meals and staying hydrated, you're already giving your body what it needs. Creatine can be useful for those training at high intensities,

but not effective for those only doing low to moderate-intensity aerobic activity.

With Help from Extension, Oregon Leads the Nation in Christmas Trees

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and deal with them on our end,” Grogan said.

At times, he said, border inspectors will misidentify a pest and wrongly block a shipment and having a professional like Rajarapu in place can help get those shipments moving again is extremely helpful.

When it comes to fungal diseases, Oregon is home to several that can play havoc on Christmas trees, the most important one being Phytophthora root rot.

“That particular root rot is very hard to manage once the tree is infected, it is difficult to grow another Christmas tree in that spot because its spores exist for more than 20 years in the soil,” Rajarapu said. “So, that has been a huge challenge, because growers are losing land.”

Introduction of species in recent years that are more tolerant to the root rot, particularly the Nordmann fir and the Turkish fir, has helped mitigate some of these concerns, Rajarapu said. “They aren't completely resistant, but they can tolerate the infection to a certain extent,” she said.

Rajarapu and other researchers across the country are now working on developing new Christmas tree varieties that are resistant to root rots. As part of these efforts, she is also collaborating with researchers in the U.S., Canada, and Denmark on developing molecular tools to shorten the breeding cycle of Christmas trees to help breeders develop trees with desirable traits. Within that program, which is funded by a USDA Specialty Crop Research Initiative grant, Rajarapu is working with researchers on sequencing the genome of four different fir species: Noble fir, Nordmann fir, Turkish fir, and Fraser fir, a tree widely grown in North Carolina.

Ultimately, Rajarapu said she believes it will take a combination of better genetics and improved management practices that will help Christmas tree growers thrive into the future in the face of drought, pests, and diseases.

And maybe, with help from OSU Extension, Oregon can stay on top.



Independent third-party testing labels like NSF, USP, or Informed Choice on supplement labels confirm that what is listed on the ingredients is actually in the supplement.



Putting Your Garden to Bed

By Otillia Schreuder

Putting your garden to bed in the fall well will allow your spring garden to be productive and healthy. It can be hard to know where to start. Below we have included helpful tips to assist you in starting to put your garden to bed.

Annual Plants

Vegetables

- Remove your non-cold hardy vegetables from the garden. This includes but is not limited bean, squash, and tomato. They can be composted if they are disease free. If they are diseased, you can put them in the city green bins or burn them.
- If you would like to extend the life of your annual vegetable plant, you can cover them at night to extend the season.
- Hardy vegetables can be left in the garden to grow. This includes but is not limited to carrots, radishes, garlic, and leeks.

Annual Ornamental Plants

- It is helpful if you can leave your ornamental plants over winter to provide

habitat for the bugs over winter. If you prefer a neater garden, you can pull a portion of the plants and leave other.

- If you have significant pest or disease problems, it is recommended to remove your annual ornamental plants from the environment. This practice will reduce the amount of pest challenges or disease challenges in your garden.
- If you have non-hardy bulbs, dig the bulbs up and store them until next spring. For more information, I would recommend looking at <https://beav.es/bulbs>.
- Plant ornamental seeds with a vernalization period. For more information, please visit <https://beav.es/vernalization>.

Perennial Plants

Ornamental Plants

- Fall is a great time to plant native perennial plants. If planted in a drought year, be sure to water them to ensure they get a good start. For more information, please visit the Benton Soil and Water Conservation District website <https://beav.es/>

native.

- Certain ornamental perennial plants need to be cut back to ensure good growth for next growing season. For more information please visit (<https://blog.greatgardenplants.com/10-perennials-you-can-cut-back-in-fall-10-you-shouldnt/>).
- For plants planted outside, they can be left outside if they are within your local cold hardiness zone. For plants that are best suited for zones above your zone, it is recommend to pot and overwinter your plants inside or within a greenhouse. To find what zone you are in please visit <https://beav.es/planthardiness>.
- Roses should be pruned from mid-February to early March. For more information, please visit <https://beav.es/roses>.

Vegetables

- Certain perennial vegetables including rhubarb and asparagus will die back and come back in the spring. It is recommended to cut them back in the fall. For more

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information about winter gardening, please visit <https://beav.es/veg>

Fruit Trees

- Many fruit trees need to be pruned in the winter. It is recommended to prune prior to growth in the spring and after the early winter freezes. For more information, please visit <https://beav.es/pruning>.

Herbs

- Most but not all herbs are perennials. For herbs

that are best suited for zones above your zone, it is recommend to pot and overwinter your plants inside or within a greenhouse. For more many information about wintering herbs, please visit <https://beav.es/herbs> General Garden Management

- Remove the weeds and debris from the ground.
- Rake the leaves into around your tree bases, garden

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November-December Gardening Calendar for Western Oregon

NOVEMBER

Timely advice on garden chores, fertilizing, pest control, and more from OSU Extension. These tips are not necessarily applicable to all areas of Oregon. For more information, contact your local Extension office.

Oregon State University Extension Service encourages **sustainable gardening practices**.

Practice preventive pest management rather than reactive pest control. Identify and monitor problems before acting and opt for the least toxic approach. Conserve biological control agents such as predators and parasitoids that feed on insect pests.

Planning

- Force spring bulbs for indoor blooms in December.

Maintenance and cleanup

- Service lawn mower.
- Check potatoes in storage and remove any going bad.
- Place a portable cold frame over rows of winter vegetables.
- Place mulch around berries for winter protection.
- Cover rhubarb and asparagus beds with composted manure and straw.
- Rake and compost leaves that are free of diseases and insects. Use mulch to prevent erosion and compaction from rain.
- To protect built-in sprinkler systems, drain the system and insulate the valve mechanisms.
- Clean and oil your lawnmower and other garden equipment and tools before storing them for winter. Drain and store hoses carefully to avoid damage from freezing. Renew mulch around perennial flowerbeds after removing weeds.
- Protect tender evergreens from drying wind.
- Tie limbs of upright evergreens to prevent breakage by snow or ice.
- Trim chrysanthemums to 4 to 6 inches after they finish blooming.
- Leave ornamental grasses up in winter to provide texture in the landscape. Cut them back a few inches above the ground in early spring.
- **Western Oregon:** Last chance to plant cover crops for soil building. You can also use a 3- to 4-inch layer of leaves, spread over the garden plot, to eliminate winter weeds, suppress early spring weeds and prevent soil compaction by rain.
- **Western Oregon:** Watch for wet soil and drainage problems in yard during heavy rains. Tiling, ditching and French drains are possible solutions. Consider rain gardens and bioswales as a long-term solution.
- **Western Oregon:** Take cuttings of rhododendrons and camellias for propagation; propagate begonias from leaf cuttings.
- **Western Oregon:** Prune roses (tea and floribunda, but NOT climbers and ramblers) to around 3 feet in height to prevent winter damage.
- **Central/eastern Oregon:** If there is no snow cover and the ground is warm enough, water your newly

planted perennials, trees and shrubs every 6 to 8 weeks. Give them a deep soaking to keep them from drying out.

- **Central/eastern Oregon:** Wrap the trunks of young, thin-barked trees (maples, aspen, ash) with paper tree wrap late in the month to prevent sunscald. Remove in April. Wrap new trees two to three years in a row until the outer bark has thickened.

Planting and propagation

- Plant a window garden of lettuce, chives and parsley.
- It's a good time to plant trees and shrubs. Consider varieties that supply food and shelter to birds, such as sumac, elderberry, flowering currant and mock orange.
- **Western Oregon:** Still time to plant spring-flowering bulbs, such as tulips, daffodils, hyacinths and crocuses. Don't delay.
- **Western Oregon:** Good time to plant garlic for harvest next summer, and to transplant landscape trees and shrubs.

Pest monitoring and management

Use chemical controls only when necessary and only after thoroughly reading the pesticide label. First consider cultural, then physical and biological controls. Choose the least-toxic options, and use them judiciously. Some examples include insecticidal soaps, horticultural oils, botanical insecticides, and organic and synthetic pesticides.

- Rake and destroy leaves from fruit trees that were diseased this year. Remove and discard mummified fruit.
- Check firewood for insect infestations. Burn affected wood first and don't store inside.
- Treat peaches four weeks after leaf fall spray for peach leaf curl and shothole diseases.
- **Western Oregon:** Moss appearing in lawn may mean too much shade or poor drainage. Correct site conditions if moss is bothersome.
- **Western Oregon:** Bait garden for slugs during rainy periods. Use traps or phosphate baits, which are pet-safe.
- Monitor landscape plants for problems. Don't treat unless a problem is identified.

Houseplants and indoor gardening

- Reduce fertilizer applications.

DECEMBER

Maintenance and clean up

- **Western Oregon:** Do not walk on lawns until frost has melted.
- Spread wood ashes evenly on your vegetable garden. Use no more than 1.5 pounds per 100 square feet per year. Don't use if the soil pH is greater than 7.0 or if potassium levels are excessive.
- Protect new landscape plants from wind. Use stakes, guy wires or windbreaks as needed.
- Yard sanitation: rake leaves, cut and remove withered stalks of perennial flowers, mulch

flowerbeds, and hoe or pull winter weeds.

- Turn the compost pile and protect from heavy rains, if necessary.
- During heavy rains, watch for drainage problems in the yard. Tilling, ditching, and French drains are possible short-term solutions. Consider rain gardens and bioswales as a longer-term solution.
- Check stored flower bulbs, fresh vegetables, and fruits for rot and fungus problems. Discard any showing signs of rot.
- Tie limbs of columnar evergreens to prevent snow or ice breakage.
- **Central/eastern Oregon:** Water your plants every six to eight weeks with a deep soaking to keep them from drying out.
- **Western Oregon:** Make sure that landscape plants in protected sites receive water regularly during the winter.

Planting and Propagation

- **Western Oregon:** This is a good time to plant trees and landscape shrubs.

Pest monitoring and management

Use chemical controls only when necessary and only after thoroughly reading the pesticide label. First consider cultural, then physical and biological controls. Choose the least-toxic options, and use them judiciously. Some examples include insecticidal soaps, horticultural oils, botanical insecticides, and organic and synthetic pesticides.

- Monitor landscape plants for problems. Don't treat unless a problem is identified.
- Check for rodent damage around bases of trees and large shrubs. Remove weeds to prevent rodents from using them as hiding places. Use traps and approved baits as necessary.
- Avoid mounding mulching materials around the bases of trees and shrubs. The mulch might provide cover for rodents.
- Monitor spruce trees for spruce aphids. Treat if present in large numbers. Read and follow pesticide label directions.

Indoor Gardening

- Protect poinsettias from cold. Place them in sunlight; don't let the leaves touch cold windows. Fertilize with houseplant fertilizer to maintain leaf color.
- Monitor houseplants for adequate water and fertilizer. Water and fertilizer requirements generally are less in winter.

Trade-name products and services are mentioned as illustrations only. This does not mean that the Oregon State University Extension Service endorses these products and services or intends to discriminate against products and services not mentioned.

Master Gardener Volunteers are here for you

Linn: 541.967.3871
linn.mg@oregonstate.edu

Benton: 541.713.5000
bentonmg@oregonstate.edu

Putting Your Garden to Bed

Continued from Page 6

beds or other growing areas.

- Leave your brush pile with trees, brush, and branches out. It provides a habitat for the bugs. For more information, reference the xerces society <https://beav.es/leaves>.
- Clean your tools with isopropyl alcohol and a rag.

Soil Management

- Testing your soil allows the gardener to make decisions with data about soil management. Among other things, it allows you to understand what nutrients are present in the soil and the pH. For information on how to test your soil, please visit <https://beav.es/soil>.
- If you are planning to fertilize, compost, or lime your soil, fall is a good time to do it. For more information, please visit <https://beav.es/fertilize>.
- Mulch your garden beds, around trees, and other growing areas. You can use leaves, compost, or other mulching materials.

Cover Crops

- Planting a winter crop is a great way to keep the soil covered during the rainy season. For more information, please visit: <https://beav.es/covercrop>.

Irrigation/Watering

- Bring your hoses inside for the winter. Prior to bringing them in empty water from the hoses.
- Winterize your drip irrigation or sprinkler system. For more information about winterizing a drip irrigation system (<https://beav.es/drip>) and sprinkler systems (<https://beav.es/sprinkler>)
- If drought conditions are present, keep perennials adequately watered. This may include watering into fall or earlier winter. If plants are drought stressed, they will be less cold hardy and more susceptible to damage from biotic or abiotic factors.

Are you interested in becoming a Master Gardener in Linn or Benton Counties?

We are holding open house session for the 2026 Linn and Benton Master Gardener Training Program. The Oregon State University Extension Master Gardener™ program educates Oregonians about the art and science of growing and caring for plants. We are in 27 counties across the state, and train thousands of Master Gardener volunteers. OSU Extension Master Gardeners are volunteer educators, neighbors, and on-the-ground researchers who serve their community with solid training in science-based, sustainable gardening and a love of lifelong learning.

If this sounds like something that might be for you, consider coming to one of our information sessions to learn more and get your questions answered.

- December 9 6-8 p.m., Benton County Extension Office, Sunset room*
- December 11 6-8 p.m., Linn County Extension Office, Large Conference room**
- December 17 10 a.m.-12 p.m., Benton County Extension Office, Sunset room*
- December 18 10 a.m.-12 p.m., Linn County Extension Office, Large Conference room**

- * Linn County Extension Office Large Conference Room, 33630 McFarland Rd, Tangent, OR 97389



Master Gardener volunteers get to help people with gardening techniques at workshops and other events. They are also present at farmers markets in their area staffing clinic tables. The Master Gardeners program is so much more than volunteering - it's often a social outlet where lifelong friendships develop.

- ** Benton County Extension Office, Sunset room, 4077 SW Research Way, Corvallis, OR 97333

If you'd like a courtesy reminder e-mail the week before the application opens, sign up for the e-mail list <https://beav.es/LBMG>.

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15 Branches across 13 communities in the Willamette Valley
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Erica Chernoh
541-344-1709
erica.chernoh@oregonstate.edu

Commercial Agriculture Tree and Small Fruit

Fruit & Nut production in the South Willamette Valley

The Willamette Valley is a fruitful region for farming. The soil is rich and fertile, and the temperate climate is suitable for growing many different types of fruits and nut crops.

Oregon is the number one producer of hazelnuts in the United States (U.S.) with over 88,000 acres planted in the Willamette Valley (USDA-NASS, 2024), which accounts for 99 percent of the hazelnut production in the U.S.

According to the 2022 USDA Census of Agriculture, 10,915 of those acres are planted in Linn County, 10,875 acres in Benton County, and 3,964 acres in Lane County. The hazelnut industry in Oregon has seen significant growth over the past decade, growing from around 35,000 acres in 2013 to 88,000 acres in 2024. The increase in acreage is largely due to the release of new hazelnut cultivars that have resistance to Eastern Filbert Blight (EFB), a disease that plagued the hazelnut industry for many years. These new varieties, which were developed at Oregon State University, allowed growers to replace susceptible trees and provided an additional tool to fight EFB. New plantings and the conversion of land previously used for other crops also contributed to the increase in acreage and production. In 2024, in-shell production increased to 96,800 tons, a record crop, and \$162 million in production value (USDA-NASS, 2024). It is expected that Oregon's hazelnut



Blueberries



Hazelnut orchard

Fruit & Nut crop acreage in the south valley

Crops	Lane	Linn	Benton	Total
Hazelnuts	3,964	10,915	10,875	25,754
Berries	546	3,180	275	4,001
Tree Fruits	1,398	642	614	2,654
Grapes	1,028	82	515	1,625

Source: USDA 2022 Census of Agriculture • References available upon request

production will continue to increase as many of the younger orchards mature and produce higher yields. While Oregon produces most of the hazelnuts produced in the U.S., the U.S. ranks third in hazelnut production worldwide, with Turkey and Italy ranking first and second in production.

Hazelnuts aren't the only crop we grow

Hazelnuts are not the only orchard crop grown in the south Willamette Valley; there are still a number of commercial apple, pear, cherry, and plum orchards.

- There are 4,600 acres of apples planted in Oregon, the majority of which are grown in the Hood

River Valley and along the Columbia River (USDA-NASS, 2024). In Lane County there are 192 acres of apples, 135 acres in Linn County, and 54 acres in Benton County (USDA-NASS, 2022).

- Oregon is the second largest producer of pears in the U.S. with over 15,000 acres planted, most of which are grown in the Hood River and Rogue Valleys. In the south Willamette Valley, there are 60 acres of commercial pear production in Linn County, 34 acres in Lane County, and 14 acres in Benton County (USDA-NASS, 2022).
- Oregon is the third

largest producer of sweet cherries nationwide, with 11,500 acres planted in Oregon. Most are grown in the Mid-Columbia valley, but there is still significant production in the Willamette Valley, including 89 acres in Linn County, 26 acres in Lane County, and 10 acres in Benton County (USDA-NASS, 2022).

The climate and soil in the Willamette Valley are ideal for growing many different types of berries. Oregon is one of the top berry producers in the United States, producing 276 million pounds of high-quality berries (USDA-NASS, 2022).

- Oregon ranks second in blueberry production in the U.S., producing 152.9 million pounds of blueberries on 15,200 acres in 2024, the majority of which are produced in the Willamette Valley (OBC, 2024). The south valley accounts for 2,836 of these acres, with 2,218 acres in Linn County, 433 acres in Benton County, and 185 acres in Lane County (USDA-NASS, 2022).
- While acreage has fluctuated over the past decade, Oregon strawberries are still renowned for their quality and sweetness. As of 2022, there were a total of 1,853 acres of strawberries grown in Oregon, with 469 acres grown in the south Willamette Valley (USDA-NASS, 2022).
- Oregon is the number one producer of blackberries, marionberries and black raspberries in the U.S., with over 7,000 acres planted in Oregon (ORBC, 2024; USDA-NASS, 2022).

Oregon is also known for producing high quality wines, especially Pinot Noir.

- Oregon is the fourth largest wine grape producing state in the U.S., with 27,000 acres planted producing over 84,000 tons. There are 8,527 acres of grapes grown in the south Willamette Valley, with 1,028 acres in Lane County, 515 in Benton County, and 82 acres in Linn County (USDA-NASS, 2022).

Commerical Agriculture Small Farms

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Fall Regional Farmer Gathering - Food, Music, and Connection!

Come connect with one another over delicious food, music, and help provide input on next year's associated activities.

**Please come regardless of whether
you have attended events before**

Your presence and input are highly valued. This is a great opportunity to connect in person with other farmers/land stewards in your area and with your regional Small Farms Team members.

**Friday November 21 • 5-7 p.m.
Long Tom Grange 25823 Ferguson Rd, Junction City**

RSVP Here: <https://beav.es/ZdW>

Questions or accommodations?
Contact Teagan.moran@oregonstate.edu

Fall migration brings increased risk of Highly Pathogenic Avian Influenza (HPAI)

As wild birds begin to migrate during the transition into fall, the risk for transmission of highly pathogenic avian influenza (HPAI) to domestic birds will increase.

So far in October, the U.S. Department of Agriculture's National Veterinary Services Laboratory (NVSL) has confirmed the presence of Highly Pathogenic Avian Influenza (HPAI) in 5 mixed-species backyard poultry flocks located in Deschutes, Malheur, and Wallowa counties. Samples from the flocks were initially sent to the Oregon Veterinary Diagnostic Laboratory (OVDL) at Oregon State University (OSU) for testing. OSU confirmed the presence of HPAI, and NVSL verified the results a few days later in each case.

In response, Dr. Ryan Scholz, the State Veterinarian for the Oregon Department of Agriculture (ODA), placed the farms under quarantine. A team from the ODA then humanely euthanized all the poultry on the properties. None of the animals from the farms entered the food supply chain or were intended for the commercial food market.

Since May 2022, Oregon has reported three affected commercial poultry flocks and 47 backyard flocks. It is essential to note that when meat and egg products are properly prepared and cooked, HPAI does not pose a risk, and these food items remain safe for consumption. The U.S. Centers for Disease Control (CDC) also recommends choosing pasteurized milk and dairy products to protect your health.

Now is the time to review and implement biosecurity protocols to reduce disease transmission from wild to domestic birds or livestock.

- Restrict access to your property and keep your birds away from other birds.



Wild birds migration brings increased risk of transmission of avian influenza (HPAI) to domestic birds.

- Keep a designated pair of shoes to wear around your birds, wash your clothing after visiting them, and use disinfectants correctly.
- Clean and disinfect cages, poultry equipment, and car tires after visiting a farm store, poultry swap, or other location with birds present.
- Keep new birds separate from your flock for 30 days; quarantine returning birds from the rest of your flock after visiting a poultry swap or other event.
- Do not share equipment or supplies with others, but if you must, disinfect them first.
- Wash your hands before and after bird handling.

Any instances of death or illness among domestic birds should be reported immediately to the ODA by calling 503-986-4711.

To report the death of wild birds, please get in touch with the Oregon Department of Fish and Wildlife (ODFW). Refrain from collecting or handling the birds; instead, call 1-866-968-2600 or email Wildlife.Health@odfw.oregon.gov.

Source: Oregon Department of
Agriculture - newsroom

It's okay to ask for help.

If you or someone you know is struggling
call or text anytime 24/7:

**AgriStress
Helpline**
for Oregon
833-897-2474



Photo Credit: Amanda Loman



Oregon State University
Extension Service



Oregon State University
Extension Service

Stop the Bleed Training For Farmers & Rural Land Stewards

Thursday, November 13th
5:30pm -7:30pm
Corvallis, OR
Cost: \$20

*Scholarships Available
**Includes Stop the Bleed Kit

Register Here:

<https://beav.es/x8x>

Accommodation requests?

crystal.kelso@oregonstate.edu or (541) 730-3539



Safe Storage Starts at Home



Prescription medications are handled with care every step of the way, from the manufacturer to your local pharmacy. But once those bottles come home, the responsibility shifts to us. Safe storage helps keep our families, friends, and community protected.

Lock it up. In a drawer or a cabinet that can be locked, or a lock box that is out of reach of children and guests

Monitor your medicine. Know how much you've used, how much remains, and keep a list of all the medications in the house. If some of your medication is missing, you'll know right away.

Check with family and friends. Make sure other family members are securing their medicine before your kids visit them.

Store medication as directed.

Usually, that means a cool, dry place, not a kitchen or bathroom where things can get hot and humid. But sometimes they need to be refrigerated. Ask your pharmacist if you're unsure.

Always use the original container the medicine came in. Make sure the label remains attached and all child-resistant caps are secured. Do not combine medications into one bottle.

There are many types of medication lock boxes available in stores and online. Explore a few and choose the option that's best for your family.

Source: *Take Meds Seriously Oregon*

Check out the latest edition of Oregon Small Farm News

Oregon Small Farm News is a free online newsletter that concentrates on both commercial small farm entrepreneurs as well as non-commercial small acreage landowners. Our focus embraces organic/biological and conventional farming systems and emphasizes three areas:

- **Small Acreage Stewardship** - Addressing enterprises, land management and soil and water quality for non-commercial small acreage's.
- **Commercial Small Farms** -



Entrepreneurial Agriculture
Addressing high value horticulture, livestock and poultry, and alternative crop production emphasizing organic and pasture-based systems and

Continued on Page 20



Recertification Credit Reminders for Licensed Pesticide Applicators

By Christy Tanner

With the end of the year approaching, it is a good idea for licensed pesticide applicators to check whether they have accumulated enough recertification credits. Pesticide applicators must be certified every five years. You must pass knowledge tests to become certified initially. Once certified, you can avoid having to re-take the tests by attending educational programs that have been approved for credits by the Oregon Department of Agriculture. Accumulating the required number of credits lets you become

License Type	Total Credits	CORE Credits (included in total)	Maximum credits per year
Private Applicator	16	4	8
Public Applicator, Commercial Applicator, or Pesticide Consultant	40	0	15
Pesticide Apprentice*	8 (annually)	4 (annually)	

* A pesticide apprentice is not considered a certified applicator and must be supervised while making pesticide applications. This license is renewed annually and requires either 8 (including 4 CORE) recertification credits each year, or re-testing.

recertified for the next five year period.

To check your credit hours, go to <https://beav.es/qwt> and enter your license number. This will show how many credits you need,

when your certification period ends, and a list of the accredited courses you have attended so far.

The required number and types of credits needed, depends on what type

of license you have. For example, private applicators need four CORE credits, which cover specific topics including laws and safety. If you end up with more CORE credits than you need,

they will count as regular credits. There are limits on the number of credits you can accumulate in a single year, so it is important to plan ahead and earn credits over multiple years. code below.

If you are in need of credits, you can search for recertification courses on the Oregon Department of Agriculture website. You can find the course search feature at <https://beav.es/UYN>. Many online courses and webinars are available through the Pesticide Safety Education Program (PSEP) at OSU. You can learn more at <https://agsci.oregonstate.edu/psep>.

South Valley Field Crop Notes for November-December

General Management

- Seed certification: remember to sign up new plantings within 60 days for seedling inspections or crop history.
- Slug bait timing is critical – begin as soon as weather conditions are favorable. Baiting is most effective in the evening, with night temperatures above 45°F, wind speed less than 5 mph, and in the absence of heavy rains.
- Monitor field edges for winter cutworm damage such as notched leaves or plants cut through the stem at soil level.

Grass

- In established grass seed fields complete sequential

preemergence herbicide applications by late November for maximum effectiveness on grass weeds and to ensure crop safety.

- Fall/winter herbicide application in established grass seed fields can help manage tough-to-control bluegrass species, especially roughstalk bluegrass. The best combination seems to be following the earlier pre-emergence applications with Outlook, Dual, or Fierce.
- If established grass weeds are present, glufosinate can also be added to Nov pre-emergence applications.
- Consider controlling

broadleaf weeds in newly established grasses if weed pressure is high. There are numerous broadleaf herbicides that can be used at this timing.

Wheat

- Increase seeding rates to 33 seeds/ft² (100-150 lbs/ac depending on seed size) for winter wheat plantings after Nov 1st. Complete winter wheat plantings by late Nov if possible.
- If planting wheat in Nov/Dec pick varieties that are suitable for later plantings (e.g. LCS ArtDeco, LCS Biancor, LCS Drive, Goetze, SY Assure).
- In winter wheat, use Axiom, Zidua, or Anthem Flex for control of grass



A slug feeding on perennial ryegrass

- and broadleaf weeds. Read labels carefully as each product has slightly different application timings for use in wheat. Ensure wheat is seeded 1-1.5" deep to ensure crop safety.
- Reduce Axiom rate to 8 oz/ac if planting winter wheat

late in Nov/Dec.

Mint

- Control grass weed patches in mint with clethodim or sethoxydim before heavy frosts set in. Watch for weed escapes and spot spray. Prepare for dormant timing herbicide applications.

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Week 5: Wildfire Resilience

Week 6: Restoration Project Tour



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More info at www.Luckiamute.org/PFYL



Save the dates - Upcoming winter meetings

2026 Winter Seed and Cereal Crop Production Meetings

- Roth's Hospitality Center – 1130 Wallace Rd, West Salem. Tuesday, January 6, 8:30 a.m. – Noon
- Central Electrical Training Center – 33309 OR-99E, Tangent, OR 97389. Tuesday, January 6, 1:30 p.m. – 5:00 p.m.
- Forest Grove Elks Lodge – 2810 Pacific Ave, Forest Grove. Wednesday, January 7, 8:30 a.m. – Noon

Other Meetings:

- Willamette Valley Ag Expo – November 11-13, 2025 at the Linn County Fair and Expo Center. Pesticide recertification courses on Wednesday and Thursday, 4 CORE credits available. Admission is \$5. Visit wvaexpo.com for more information.
- Oregon Seed League Annual Meeting and Trade Show – December 8-9, 2025 at the Salem Convention Center. Pesticide recertification courses both days, 2 credits each day. Visit seedleague.org for more information.
- Oregon Ryegrass Growers Association Annual Meeting – January 14, 2026 at the Linn County Fair and Expo Center. Visit oregonryegrassgrowers.com/ for more information.



OSU Extension Fire Program Celebrates Award of Wildfire Ready Linn County Grant

By Dr. Kayla Bordelon,
Regional Fire Specialist,
OSU Extension Fire Program

I'm excited to share some great news for Linn County! The Wildfire Ready Linn County project has been awarded a large federal grant (\$8.7 Million) to help our communities get better prepared for wildfire. The project is funded through the Community Wildfire Defense Grant (CWDG) program and is led by the Sweet Home Fire and Ambulance District, along with many local partners in the Linn Wildfire Mitigation Group.

This grant brings together local fire districts, state and local agencies, watershed councils, and community organizations to reduce wildfire risk across eight at-risk communities in eastern Linn County: Cascadia, Lacombe, Holley, Sweet Home, South Lebanon, Crawfordsville, Sodaville, and Waterloo.

The OSU Extension Fire Program co-led the development and writing of this proposal to support Sweet Home Fire and other partner organizations who will share in the funding. These include the Oregon Department of Forestry, Lebanon Fire District, the South Santiam and Calapooia Watershed Councils, and the Linn County Juvenile Department. Other lead authors of this proposal beyond the funded partners



Writing a federal grant proposal is no small feat! It took us more than six months of working together, sharing drafts, and lots of strong coffee to build a successful proposal. Here we are at Margin Coffee in downtown Albany working on it last February.

include Stephanie Stafford, Fire Risk Reduction Specialist with the Oregon Department of the State Fire Marshal (OSFM) and Kate Bentz, Associate Planner for Linn County. As you can see, teamwork makes the dream work in Linn County!

This five-year, \$8.7 million project focuses on three main goals:

- Building stronger partnerships for wildfire risk reduction – The grant funds new positions to coordinate wildfire risk reduction projects and together we'll create shared tools and resources to plan and track those efforts.
- Reducing wildfire fuels

– The grant funds local crews to complete free defensible space work around homes, host free community chipper days so residents can safely get rid of brush and branches, and do free wildfire risk assessments for residents.

- Wildfire education – We'll host community wildfire preparedness events, teach nearly 1,000 K-12 students about fire each year, and support neighborhood-level wildfire preparedness activities.

By the end of the grant, we expect to complete over 850 home ignition zone assessments, remove

vegetation around 325 properties for defensible space, and provide wildfire education to thousands of community members, among other risk reduction activities.

This grant is a huge step forward for Linn County. It's not just about reducing wildfire risk right now – it's about building lasting systems for collaboration, community preparedness, and a more fire-resilient future.

If you want to learn more about Linn County's wildfire plan, visit:

<https://www.linncountyor.gov/planningbuilding/page/>

community-wildfire-protection-plan.

You can also read more about the national Community Wildfire Defense Grant program here: <https://www.fs.usda.gov/managing-land/fire/grants/cwdg>

This is the second successful Community Wildfire Defense Grant proposal I've co-authored since the program began in 2023. In 2024, I worked with my partners in Wasco County to help them secure \$5.9 million for wildfire mitigation projects, which are now underway. Next year, I'm rolling up my sleeves with the Clackamas Wildfire Collaborative on another proposal to spread this important work further.

I'm so proud to be part of a community and a team that's taking wildfire resilience seriously and doing something about it in Linn County. Huge thanks to everyone who sent in letters of support for the grant proposal, including the Sweet Home Ranger District of the Willamette National Forest, the Linn County Board of Commissioners, the Linn County Sheriff's Office, the Oregon State Fire Marshal (OSFM), the OSU Extension Fire Program, the City of Sweet Home, State Representative Jami Cate, Cascade Timber Consulting, and Linn County Parks & Recreation.

The Power of Community Science

By Lorelle Sherman,
Extension Forester

What if I told you your backyard or trailside nature sightings could be turned into scientific observations? From spotting a bird in your garden to photographing a mushroom, everyday observations documented using community science tools help researchers track biodiversity, monitor ecosystems, and inform land management decisions. OSU Extension Forestry & Natural Resources is working hard to develop the tools and guidance necessary for Oregon landowners to get involved.

So, what is community science? You might also hear the terms citizen science or participatory science. While they're often used interchangeably, they reflect slightly different emphases. Citizen science traditionally refers to public participation in professional research. Community science highlights collaboration and shared purpose—science done with communities, not just for them. Participatory science is the broadest term, describing any research process where non-scientists help shape or carry out the work. Whatever you call it, the goal is the same: to make science accessible, engaging, and connected to the places around us.

This summer, Makena Westermeyer, OSU College of Forestry undergraduate student, helped us test the use of the Merlin Bird ID app as a community science tool for measuring bird diversity at the McDonald-Dunn Research Forest. Merlin records and identifies all bird calls and songs detected within an allotted amount of time. Makena, a skilled birder, compared Merlin's



Makena Westermeyer helped test the use of the Merlin Bird ID app as a community science tool for measuring bird diversity at the McDonald-Dunn Research Forest.

results with traditional bird survey methods to evaluate its accuracy and potential for broader use. With well-marked listening stations across the forest, community members could contribute valuable bird data while sharpening their own identification skills. Once Merlin lists are uploaded to the eBird platform (more on eBird below), these observations become part of a global database accessible to researchers worldwide. This pilot project demonstrates how simple tools can expand community participation in biodiversity monitoring.

Landowners can mimic this design by setting up their own listening stations. Mark them with rebar and flagging or PVC pipe spraypainted for visibility. At each site, open your Merlin app, make sure to stay silent, and hit record for 5- or 10-minutes. You can either record your results by station in your management plan or take it a step further and input them into eBird to ensure your observations are usable by researchers.

Community Science Tools to Start With

Here are a few community science tools that can help you contribute to research while

building your ecological skills:

- **iNaturalist** (www.inaturalist.org) lets you upload photos of plants, animals, and fungi. The app uses image recognition and community expertise to help identify your observation, and each verified record contributes to global biodiversity databases. Try adding observations from your yard, local park, or favorite hiking trail. Great for all taxa.
- **eBird** (www.ebird.org), managed by the Cornell Lab of Ornithology, allows birdwatchers of all levels to record sightings. Your checklists help scientists track bird populations, migration patterns, and seasonal changes in abundance. eBird even provides personalized life lists and regional bird alerts.
- **Merlin Bird ID** (merlin.allaboutbirds.org) pairs perfectly with eBird. It can identify bird songs and calls using your phone's microphone, making it an accessible entry point for beginners. The app learns from your region's bird community and helps refine your skills with each use.

Register Here:
<https://beav.es/x8N>

QR Code

Small Tree Pruning Workshop

Corvallis, OR
Saturday, Nov. 1st
9am – Noon

Learn the essentials of small tree structural pruning in this hands-on workshop designed for both professionals and community tree stewards.

OSU Mycology Field Day

Whether you are new to the world of fungi or a seasoned mycologist, we invite you to join us at the first ever OSU Mycology Field Day! This small community festival will be an opportunity for students, community members, and researchers to get together and celebrate fungal diversity while learning the skills necessary to make valuable scientific observations through existing community science platforms. We are using this event to kick off a fungal diversity monitoring community science project at the McDonald-Dunn RF. We are also excited to have expert field taxonomist, mushroom photographer, and author of “Mushrooms of Cascadia” and “Mushrooms of the Redwood Coast,” Noah Siegel, joining us as an instructor.

Event page: <https://beav.es/x22>



Tentative schedule (subject to change):

- 9:30am-10:00am: Check-in and coffee
- 10:00am-11:00am: Welcome and overview
- 11:00am-12:00pm: Track 1 - Introduction to iNaturalist
Track 2 - Macrofungi photography
- 12:00pm-1:00pm: Fungal diversity foray
- 1:00pm-2:00pm: Lunch (light lunch provided)
- 2:00pm-3:00pm: Track 1 - Introduction to fungal identification
Track 2 - Macro and micro features of fungi (microscopy)
- 3:00pm-3:30pm: Coffee break
- 3:30pm-5:00pm: Fungal diversity monitoring training in the field
- 5:00pm-6:00pm: Social hour

Linn County 4-H Youth Development

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Sarah Neuschwander - Giving Back to 4-H

By Jody Hill,
Linn County 4-H

Sarah Neuschwander wears many hats in her service to the 4-H community. Whether she is leading her 4-H club, JR Farms, or facilitating the operation of the Linn County Youth Livestock Auction committee, Sarah donates her time to making sure 4-H members have opportunities to grow.

Sarah started her 4-H career in Marion County as a young child and continued into her adult life raising and showing livestock. As her daughter, Maddie, became old enough to begin 4-H, Sarah found herself playing chauffeur. "I just can't sit still and watch," Sarah said, "so I found myself volunteering for her club." The next logical step was to start her own club. As her children grew to be more self-sufficient, Sarah had more time and opportunities to help the 4-H program. "Lots of people gave to us, so I wanted to give back."

Today Sarah is the 4-H representative for the auction committee. This job requires someone who is willing to facilitate communication. Her responsibilities include sending out all mailings to buyers and the auction checks that members receive. She also has to set up the night before the auction to make sure the auction committee



Sara N pig show



Sarah Neuschwander Master of Paperwork

has everything they need to run a successful auction.

Co-ordinating the auction pictures and supervising her "crew" as they put the pictures into frames for the buyers takes almost a full day. And who makes sure the auctioneer and spotters have plenty of snacks and water as the auction drags on? Yep, it's Sarah.

Auction day is only the culmination of a year's hard work as monthly meetings, planning, ordering supplies, and working out the logistics also take her time. "The auction takes many people from local businesses, FFA, and 4-H to run smoothly," Sarah says. "It is a well-rounded group of individuals to make the auction a success."

Sarah realizes that small communities, like Central

Linn, takes everyone to pitch in to raise successful kids.

That is why she has joined so many committees and volunteers when needed. She passes this on to her 4-H members with community outreach projects. For example, her club decorates a Christmas tree every year to be auctioned off at the Brownsville Festival of the Trees. This event supports the Brownsville library and the Sharing Hands Food Bank. As a role model, Sarah is showing her 4-H members how to be compassionate and giving, as well as growing them into future community leaders.

The best part of being a volunteer? Sarah says it is an opportunity to meet people who become friends that you wouldn't have met otherwise.

Benton County and Linn County Extension programs may offer opportunities that are only open to the residents of their respective counties. Please check with your county Extension Office if you have any questions about participation eligibility for specific programs.



PHOTO CREDIT CASSIE ENDICOTT

State Ranch Horse Contest participant runs a fun trail course.

Linn County 4-H Members travel to State Ranch Horse Contest

Five dedicated 4-H members from Linn County traveled to Klamath Falls the last weekend of September to compete in the state Ranch Horse Contest. Participants demonstrated their skills across a variety of events including a written knowledge test, roping, showmanship, equitation, trail, and working cows.

The contest not only showcased their horsemanship abilities but also provided a valuable opportunity to meet fellow 4-H members from around the state and learn new skills.

Abi, Alyssa, Trinity, Paisley, and Luci represented Linn County with pride, enthusiasm, and constant smiles throughout the weekend. We commend them for their hard work and positive representation of our local 4-H program.



PHOTO CREDIT CASSIE ENDICOTT

Trinity's last 4-H event



PHOTO CREDIT CASSIE ENDICOTT

Linn County participants

Short on Time, Big on Impact: Be a 4-H STEP Volunteer



Helping members interested in horticulture build Dish and Fairy Gardens



STEP Volunteer Iris Carrera teaching kitchen skills and healthy eating



Teaching a beginner class how to crochet.

4-H isn't just about animals and the fair. It's about giving kids opportunities to explore new interests, build confidence, and discover what they're capable of. Volunteers make this possible by leading hands-on activities in areas like cooking, art, gardening, sewing, robotics, and so much more. If you have a talent, chances are there's a young person who would love to learn it!

One fun way to volunteer is through STEP programs—Short Term Education Programs. These are perfect for busy people who want to help but don't have time for a year-long commitment. You might run a workshop series for a couple of weeks, offer a class here and there

throughout the year, or teach a small group about a special skill you enjoy. STEP volunteers bring fresh opportunities to 4-H members while keeping things flexible for themselves.

As a 4-H volunteer, you'll have the chance to work with kids of all ages, from curious 5-year-old Cloverbuds just beginning to explore, to independent teens ready to take on big projects. Youth come with all different skill levels—some may be trying something for the very first time, while others are looking to deepen their knowledge. No matter where they start, volunteers help guide them at their own pace, creating a welcoming space where every child can learn, grow, and

succeed.

No 4-H experience is needed—just a willingness to share what you know and encourage kids as they learn. Training and resources are available, so you'll feel supported right from the start.

Whether you have a few hours or a whole season to give, your time and knowledge can help shape the next generation of creators, leaders, and problem-solvers in Linn County.

Interested in learning more? Contact the Jody Hill via email at jody.hill@oregonstate.edu, or stop by our Linn County OSU Extension Service Office in Tangent!

4-H Teaches More Than Projects—It Builds Life Skills

When people think of 4-H, they often picture kids showing animals at the fair or baking cookies for a contest. While those are certainly part of the fun, the heart of 4-H runs much deeper. Every project, whether it involves livestock, cooking, robotics, or gardening, helps members build essential life skills that go far beyond the fairgrounds.

Through their work, 4-H

youth learn responsibility by caring for animals and managing deadlines. They develop respect—for their peers, leaders, and the world around them. They also master time management as they balance school, family, and project work. These lessons shape confident, capable young people ready to take on real-world challenges.

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Coops and Critters members set up a petting zoo at the 2025 Scio CARES Day

Linn County 4-H Members Shine at Oregon State Fair

Linn County 4-H members proudly represented their community at the Oregon State 4-H Fair, showcasing their talents across a wide range of categories. Participants competed in livestock, flower arranging, horse events, small animals, and exhibited static projects.

The young members found not only success in their competitions, but also built new friendships and lifelong memories. Their dedication and hard work reflected well on Linn County, highlighting the strength and spirit of our 4-H program.



Corbin showing his dog in Showmanship



Linn County members in the sheep ring



Devyn loving on her puppy



Linn County members introducing their 2025 - 2026 beef projects to the show ring

Benton County 4-H Youth Development

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New 4-H Faculty in Benton County!

Hannah Lansverk is the new 4-H Natural Resources Program Coordinator in Benton County! She is located in the Benton OSU Extension office. Hannah will be providing natural resource-themed educational opportunities to K-12 youth, working collaboratively with teachers and community partners in Benton County to engage students in outdoor education and school enrichment.

Hannah is passionate about connecting students to the natural world through engagement in research, citizen/community science, and stewardship projects. Hannah grew up in Montana where she developed a love for nature, science, and the outdoors that has lasted throughout her life.

Before moving to Oregon, she worked for community outreach and conservation nonprofit organizations across the country, including Montana, Connecticut, and Nevada. Her academic background in Biology and her love of science communication has led her to OSU Extension, and she couldn't be more excited to serve her new community in Benton County! In her personal time, Hannah enjoys birding, camping, and exploring as many wildlife refuges and local, state, and national parks as she can. Welcome, Hannah!



Hannah Lansverk

National 4-H Clover Resource

Explore fun, educational activities and learning experiences for kids and teens to do at home or in a 4-H club meeting. Whether you're a 4-H member, a 4-H club leader, a homeschooler, or just looking for some quick and fun activities to take your interests to the next level, the 4-H Clover app has something for everyone. Lessons are clearly laid out with subjects such as STEM, career readiness, emotional wellness, creative arts, animal science, and more. This is a FREE resource available on the web or as a phone app. You can explore all of the resources that are available at <https://4-h.org/clover/>. There are over 200 activities currently available and more being added regularly.

Benton County 4-H Community Events

The 4-H year begins October 1st, and every year we organize some promotional activities to teach our communities how to participate as a member or volunteer with Benton County 4-H. Our County Ambassadors (older youth leadership group) hosted an information table at the Corvallis Farmer's Market on September 27th. They interacted with hundreds of youth and adults about their involvement with 4-H. They engaged with the public through making balloon animals. There was even a special animal "ambassador" (Norman the sheep) on hand to greet the public.



4-H members attended the Corvallis Farmers Market promoting the 4-H program.



Benton County families learned about 4-H by visiting each of the project tables.

What is 4-H?

4-H is America's largest youth development organization – empowering six million young people with the skills to lead for a lifetime. 4-H is delivered by Cooperative Extension – a community of more than 100 public universities across the nation that provides experiences where young people learn by doing. Oregon State University is the land grant institution that is home to Extension and the Oregon 4-H Program. For more than 100 years, 4-H has welcomed young people of all beliefs and backgrounds, giving kids a voice to express who they are and how they make their lives and communities better.

In 4-H, we believe in:

- All young people's potential
- Developing young people who are empowered, confident, hard-working, determined, responsible and compassionate—seeing a world beyond themselves so that they have the life-long skills to succeed in college and career
- Ensuring access and equity for all
- The power of America's leading public universities
- The practice of positive youth development (PYD)* by creating positive

- learning experiences
- Caring and trusted adult mentors who cultivate positive relationships with youth
- Creating safe, diverse and inclusive environments
- Meeting young people wherever they are

4H Grows True Leaders

4H empowers young people to be true leaders. True leaders are young people who have confidence; know how to work well with others; can endure through challenges; and will stick with a job until it gets done. In 4H, we believe true leaders aren't born – they're grown. 4-H programs hands-on approach gives young people guidance, tools and encouragement, and then puts them in the driver's seat to make great things happen. Independent research proves the unparalleled impact of the 4-H experience.

Types of 4H Programs

Our programs in science, healthy living, and civic engagement are backed by a network of 100 public universities and a robust community of 4H volunteers and professionals. Through hands-on learning, kids build not only confidence, creativity and curiosity, but also life skills such as

leadership and resiliency to help them thrive today and tomorrow. 4H programs and resources are available at the national 4-H website CLOVER (<https://4-h.org/clover/about/>) or through local in-person and virtual 4H clubs, 4H camps, in-school and after-school programs. With the support of adult mentors, youth select from a menu of hands-on project ideas to complete. 4H programs are available for kids and teens ages 8-19. 4H Cloverbud programs are available for kids ages 5-8.

4H Programming

4H programs are grounded in the belief that kids learn best by doing. Kids and teens complete hands-on projects in areas like science, health, agriculture and civic engagement, in a positive environment where they receive guidance from adult mentors and are encouraged to take on proactive leadership roles. Kids can concentrate on one focus area or they can try a variety of programs throughout their 4H experience. Regardless of the project area, all 4H programs include mentoring and career readiness as core elements.

Benton County 4-H Scholarships

There are eleven Benton County 4-H scholarships totaling \$24,000 available to current 12th grade 4-H members. All enrolled graduating seniors are eligible to apply. Applications are due January 15th, to the Benton Extension office (except the Horse Leaders Scholarship, which is due April 15th). For more information, visit our

website: <https://extension.oregonstate.edu/4h/benton/awards-scholarships>.

Scholarship Donors

- Moos Family
- Decker Family
- Hitchcock Family
- Bateman Family
- Benton County 4-H Horse Project Leaders Committee

4-H members submit an application that is primarily focused on their 4-H records. 4-H record books were judged in October by a committee of 4-H volunteers. Record books were returned to the youth with comments and scores for how to improve them, which can be fixed before the scholarship application.

Ready, Set, Enroll!

Oregon 4-H enrolls youth based upon their age as of September 1, 2025:

- 5-8 year olds are Cloverbuds
- 9-11 year olds are Juniors
- 12-14 year olds are Intermediates
- 15-18 year olds are Seniors

Membership Fees: **\$45 PER MEMBER** by JANUARY 31st, 2026 in order to participate in the 2026 4-H Fair. This cost is for the first two family members (*additional family members will be \$15 each*). Fees will increase to \$55 per member starting February 1, 2026.

If a youth is interested in joining Benton County 4-H, please visit our Benton County 4-H website and complete a 4-H interest form. We work to place youth with clubs that are accepting members. Please contact the Extension office at 541-713-5000 if you have any questions.

Adult Volunteers Wanted!

The Benton County 4-H Program is actively looking for adults who want to share their time and talents with youth, aged 5-18.

Are you interested in making a positive impact on youth? Do you have an expertise that you want to share? Do you want to learn new skills? Volunteers will receive training, support from OSU faculty and staff, and from other 4-H volunteer leaders, as well as access to project and resource books and materials.

We are trying to grow the Benton County 4-H program and that is only possible with new volunteers joining and starting clubs. If you are interested in volunteering with the Benton County 4-H Program, please contact our office for more information. Upcoming trainings will be held on December 11th and January 15th at the Benton County Extension Office from 6-9 p.m. Please call 541-713-5000 to register.

Members with Disabilities

All youth are welcome in 4-H! Clubs are encouraged to invite youth with disabilities into their groups, enriching the lives of all the youth involved. If you have members in your 4-H club with disabilities or special needs who need special accommodations for participation in 4-H activities, please contact the OSU Extension Service at 541-713-5000 well in advance of any activity. Our goal is to reach all youth who wish to participate in 4-H.

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4-H Teaches More Than Projects—It Builds Life Skills

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Critters and Clovers Club at 2025 Sweet Home Harvest Festival

Perhaps one of the most valuable lessons 4-H offers is civic engagement. Members learn the importance of community involvement, leadership, and giving back. Whether they're volunteering at local events, leading club meetings, or organizing service projects, these young people are gaining firsthand experience in making their communities stronger.

A wonderful example of 4-H in action comes from the Critters and Clovers 4-H Club, which recently organized a petting zoo for the Sweet Home Harvest Festival. Similarly, the Coops and Critters 4-H Club brought the fun to Scio C.A.R.E.S. Day, helping promote Linn County 4-H with their own interactive animal display. Members proudly shared a variety of animals—from small critters to a gentle mini horse—giving community members a chance to learn about animal care and enjoy hands-on experiences. Their efforts not only brought smiles to families but also highlighted the spirit of community, service, and teamwork that defines 4-H.

In 4-H, it's not just about the ribbons or prizes—it's about raising responsible, engaged citizens who are learning to make a difference, one project at a time.

Check out the latest edition of Oregon Small Farm News

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- specialty and niche production.
- **Community Food Systems** - Address alternative and specialty marketing through creation and enhancement of local and regional food systems and farm direct marketing channels.

See the latest edition at https://smallfarms.oregonstate.edu/sites/agscid7/files/smallfarms/fall_2025_small_farm_news.pdf

To subscribe to our email list - e-mail smallfarmsprogram@oregonstate.edu

Oregon 4-H Ranch Horse Invitational

The 2025 Oregon 4-H Statewide Ranch Horse Invitational was held in Klamath Falls on September 26-28. Senior 4-H members Chloe Muravez, Makayla Lillie and Intermediate 4-H member, Ashlyn Terry represented Benton County this year. Each contestant participates in six events using skills needed to work on a ranch. These include Ranch Horse Showmanship, Cow Working, Roping, Working Ranch Horse, Ranch Horse Trail, and a Ranch ID Test. There is a champion and reserve champion awarded for each class along with an overall high point. This year, Makayla Lillie won the Senior Overall High Point, Ranch Horse Trail Champion, Ranch ID Test Champion, and Working Ranch Horse Reserve Champion with her horse Sierra!

Great job Benton County Members!



Horse project members compete in Klamath Falls.