BEEEvent Teaching Pollinator Health

By Mitch Lies, GROWING Editor

A little more than seven years ago, a conversation between Barbara Fick, then a Linn County Extension agent, and Master Gardener Volunteer Rich Little about increasing awareness of pollinators spawned a conference that today is the signature event of a campaign to educate the public about pollinators.

Just 54 participants signed up for that first BEEEvent Pollinator Conference in 2015, but its popularity grew rapidly. Attendance more than doubled in its second year and increased from there until today it annually sells out.

Site of the conference, meanwhile, shifted from a local hotel conference room, where it was held the first two years, to the Linn County Expo Center beginning in 2017, as organizers recognized they needed more room to accommodate the event’s popularity.

Throughout its run, the conference has drawn high-caliber speakers. This year’s conference, scheduled March 6, will include a keynote address by USDA research entomologist James Cane. Based at the USDA’s Agricultural Research Service station in Logan, Utah, Cane has been studying bees for 30 years. He is known for his studies in understanding how human factors can shift nesting and foraging opportunities for bee communities. Title of his presentation is “BEE all you can. Creating a Bee Haven with Room and Board.”

Also scheduled at the 2021 conference are Kathryn LeCroy, from Virginia, who will inform participants about citizen scientist-fueled research in a presentation titled “Documenting Wild Native Declines in North America;” and August Jackson, who has written a booklet on Bees of the Willamette Valley. The conference will include an update on the Oregon Bee Atlas Project and a short seminar on mason bee best practices.

Because of the COVID pandemic, the 2021 BEEEvent will be virtual. Organizers have lowered the admission charge to $20 from the normal $30. Also, because it is virtual, event capacity has increased from 200 to 500.

“We aren’t sure what to expect,” said Ranee Webb, one of a handful of Master Gardeners who has been working on the conference since its early days. “We don’t know if we will get 500 or our normal 200. But we are excited to find out.”

In general, interest in pollinator health seems to be on the rise, said Master Gardener Program Assistant Elizabeth Records. “More and more people are interested in learning how to garden in these uncertain times,” Records said, “and as part of that, there seems to be a strong interest in learning about bee habitat.

“Many people are recognizing the importance bees play in our food system and want to do their part to protect pollinator health,” she said. “And I think there is a growing awareness that home gardeners can do a lot to boost pollinator health.”

The Linn County Master Gardeners’ pollinator health education campaign includes an email publication called Bee Notes that is distributed to about 760 subscribers and includes articles of pertinence to pollinator health and tips on things like when to put out mason bee houses or cocoons. And the campaign includes an annual fall course in mason bee cocoon care.

“We do that every year because mason bees are native, and they are fantastic pollinators,” Webb said. “Just seven mason bees will pollinate an apple or cherry tree, and it would take over 500 honeybees to do so.”

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More Information
For more information on pollinators and to register for the 2021 BEEEvent Pollinator Conference, visit www.linnmastergardeners.com. The conference, scheduled on March 6, runs from 9 a.m. to 4 p.m. Admission is $20.

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Master Gardener Volunteer Rich Little, a retired entomologist, is pictured with a collection of bee cocoons. Little has been involved in the BEEEvent Pollinator Conference from its inception.
Who We Are

The Oregon State University Extension offices in Linn and Benton County offer practical, lifelong learning experiences. We sponsor conferences, workshops, demonstrations, tours, and short courses. We recruit and train 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. Seed Certification phone 541-967-3810. http://extension.oregonstate.edu/linn.

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2021 Grow This: Oregon Garden Challenge - This spring!

What is the Grow This Challenge?

Grow different seeds. Anyone can join using their own seeds! While supplies last, Oregonians who sign up for the Challenge and request seeds will receive four different seed packets free of charge. Oregon State University will send these seed packets to Extension offices for March pick-up.

How do I join?

Fill out a very short survey. Link will be posted at https://foodhero.org/growthis on March 1st.

Seed pickup (ANYONE can also join using their own seeds):
Seeds will be available by appointment in every county following county health department and Governor’s Office recommendations, including wearing face coverings and maintaining physical distance. No contact delivery is possible because seeds are in sealed envelopes that can be labeled and either put outside the office on a table or in some cases right inside the front door on a table for pickup. (For more information contact Tina.Dodge@oregonstate.edu or 541-730-3541)

Start with Storing Water for Emergency Preparedness

Oregon Office of Emergency Management has launched a campaign titled “2-Weeks Ready” to encourage Oregon residents to set aside two weeks’ worth of food, water, medicines, and other supplies.

Water is probably the most important item to have ready when a minor or major emergency happens. Each person uses roughly a gallon of water per day for drinking, meal preparation, cleanup and personal hygiene. The CDC also recommends 1 gallon of water for most pets.

For the recommended two weeks, it means you need to store 14 gallons per person and pet. For each individual, you will need two 7-gallon, camping-style water containers, 14 1-gallon jugs, 27 2-liter bottles or 53 1-liter bottles. This is a conservative amount, and you will need to use it wisely. Plans for water for livestock should also be made.

When choosing containers, consider how they will be used. Can the water be poured easily from the container? One gallon of water weighs 8.3 pounds. Will the water jugs be too heavy to transport if you are evacuated?

Water can be purchased in large containers for emergency purposes. Follow directions for storing and observe the expiration date. Using your own containers

Continued on Page 9
Face Covering Care

It looks like masks are going to be part of our lives for some time yet. Here are some tips for good hygiene and mask care:

- Wash or sanitize your hands before handling your mask, try not to touch your eyes, nose, or mouth. Wash your hands after handling your mask.
- Handle your mask by the strings or loops. Fold the mask with outside corners together.
- Store wet or dirty masks in a plastic bag and clean them soon so they don’t get moldy. Wash fabric masks along with regular laundry and dry in the dryer. If you hand wash, rinse well and hang in sunlight to air dry.
- Store clean masks in a paper bag until you need it again.
- Don’t lay masks on table tops, counters or car dashboards that may not be clean, this includes restaurant and park tables.
- Change masks if yours gets wet from sweat or saliva. Wet masks can be harder to breathe through and can be less effective than dry masks.
- “Double masking” – wearing a disposable mask under a fabric mask appears to increase the level of protection offered both the wearer and others, and can keep the fabric mask clean.
- Please dispose of masks responsibly.

Family and Community Health

Exercise Program for Older Adults

StrongWomen™ is an exercise program developed at Tufts University to increase the number of older women participating in safe and effective strength training programs. Staying strong, flexible and maintaining bone health will help keep older adults safe and independent.

OSU Extension has posted a series of short videos that guide older adults through simple exercises that are shown by research to help them maintain strong bones and flexibility.

https://extension.oregonstate.edu/strongwomen/strongwomentm-exercise-videos

Start with the Introductory Class for details about form and simple equipment you can use at home.

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http://extension.oregonstate.edu/linn
Be a Food Hero: Meal Planning Increases Nutrition, Saves Money

By Hannah Jarvis, OSU Dietetic Intern

Although food insecurity has increased during COVID, food waste is still a mounting problem in the United States. About 30–40 percent of our food supply ends up in landfills each year! That’s approximately 219 pounds of food waste per person, or about 80 billion pounds total.

To reduce food waste at home, plan meals ahead of time to ensure that you’re not buying more than you need and get creative with leftovers to keep more food out of the trash.

Benefits of meal planning:
• Encourages healthy, balanced eating habits
• Increases quality time spent with others around mealtimes
• Cuts back on food waste
• Reduces stress over what to make
• Saves time and money by only buying and making what you need

Meal planning in four easy steps:

Step 1. Look in your kitchen and cupboards to see what food items you have on hand already.

Step 2. Write down meal ideas for the week. Include breakfast, lunch, dinner, and snacks, or start with just dinner and build up from there. Visit www.foodhero.org or https://www.myplate.gov/myplate-kitchen for recipe ideas. Keep your recipe list and meal plan in an easy-to-see place like on your refrigerator.

Step 3. Create a grocery list: https://www.foodhero.org/grocery-list-editable. Sticking to your grocery list will ensure that you’re only buying and making what you need, which will be a big time and money saver long-term.

Step 4. Plan to double a recipe or two a week and eat at another meal later in the week, or freeze the leftovers for quick meals when you’re short on time.

Still not sure where to start? Here are a few quick tips to help meal planning feel a bit more approachable and sustainable.
• Plan around a theme: Mediterranean or Meatless Mondays, Taco Tuesdays, etc.


Creative uses for leftovers:
Not only do leftovers save time, money, and stress, they also mean less food waste.

Some ideas for how to put leftovers to good use include:
• Leftovers Night where you “eat down the fridge” one night a week: try to keep your leftovers in clear containers so it’s easier to see what you have on hand.
• Dinner for lunch: save leftovers and have them for lunch in the coming days.
• Puree leftover veggies for soup: add some veggie or chicken broth to your veggies, blend, heat, and eat! (Or freeze for later).
• Use kitchen scraps to make veggie stock: put trimmings in a pot, fill with water, simmer, strain, then use or freeze (just remember to cool first).

Food Safety for At Risk Populations

For most individuals, foodborne illness causes short-term discomfort, but it can result in long-term detrimental health effects such as arthritis, autoimmune disease, organ damage, and infections that can lead to severe complications, and occasionally, death.

Extra precautions must be taken when preparing and serving food to vulnerable populations that are at a higher risk of becoming ill from foodborne illness. Those falling into this category include, but are not limited to older adults, pregnant women, infants and young children, and those with compromised immune systems such as those on chemotherapy, antibiotics, transplant recipients, and those with chronic diseases. Over twenty percent of the US population falls into this susceptible group.

People who fall into the “at risk population” should avoid foods that are more likely to be contaminated with harmful bacteria. Here is a list of foods that should be avoided:
• Rare ground meat
• Raw or undercooked seafood
• Uncooked hotdogs and deli luncheon meats
• Cold deli salads such as potato and macaroni salads.
• Raw milk and raw milk cheeses (such as queso fresco)
• Soft cheeses (such as feta, Brie, Camembert, Roquefort)
• Raw and soft-cooked eggs
• Foods containing raw eggs (includes cookie dough, cake batter, Hollandaise sauce)
• Unpasteurized apple cider and other juices
• Uncooked sprouts (such as alfalfa, radish, wheat and bean sprouts)
• Unwashed vegetables/leafy greens (includes Romaine lettuce, spinach, leaf lettuce)

Practicing very good hygiene and sanitation and making sure leftovers are refrigerated promptly can also reduce the risk of illness.
What You Need to Know about the 2020-2025 Dietary Guidelines for Americans

By Hannah Jarvis, OSU Dietetic Intern

What is the Dietary Guidelines for Americans?
The current edition of the Dietary Guidelines for Americans was released at the end of 2020. First published in 1980, the Dietary Guidelines for Americans (DGA) provides science-based advice on health-promoting diets that meet the nutrient needs of Americans and reduces the risk of chronic disease like type 2 diabetes, cancer, and heart disease. Every five years, the US Department of Agriculture partners with the Health and Human Services Department to review the latest scientific and medical research to jointly compose a report containing nutritional advice for Americans. The process to develop the dietary guidelines is a rigorous one that requires extensive review by scientific experts before it is cleared and released to the general public.

The DGA also informs policymakers and health professionals to develop, implement, and evaluate Federal food, nutrition, and health policies and programs.

What Sets the 2020-2025 Guidelines Apart from Previous Editions?
For the first time in the DGA, the 2020-2025 edition considers every stage of life – infancy, toddlerhood, childhood, adolescence, adulthood, pregnancy, lactation, and older adulthood – and recognizes that dietary needs will shift as people age. According to the DGA, it’s never too early or too late to eat healthy!

The 2020-2025 Edition’s Four Overarching Guidelines
- Develop healthy habits at every age.
  - Until about 6 months of age, the DGA recommends infants to be exclusively breastfed. Breastfed infants should be provided with daily vitamin D supplementation. Continue breastfeeding for the first year of life or longer or provide infants with iron-fortified infant formula for the first year of life.
  - Around 6 months, provide infants with solid foods and drinks that are nutrient dense like fruits, vegetables, whole grains, meat and other proteins, yogurt, cheese, and water. Introduction to common allergens, like milk, eggs, fish, shellfish, tree nuts, peanuts, wheat, and soybeans, is appropriate at this age and should be served one at a time. Allow 3–5 days before introducing another new food.
  - From 12 months to older adulthood, aim to develop and maintain a balanced dietary pattern. A dietary pattern represents the foods and drinks individuals regularly consume over a period of time. A dietary pattern that is balanced includes a variety of nutrient dense foods like whole grains, fruits, vegetables, lean protein, and low-fat dairy. The Mediterranean-Style Dietary Pattern is an example of a nutrient dense pattern; read more about this dietary pattern and others at https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf, page 142.
- Customize your diet to include nutrient-dense options that honor cultural traditions, personal preferences, and budgetary considerations. There is not a one-size-fits-all dietary pattern for optimal health. The goal is to develop healthy eating habits that are enjoyable, realistic, and sustainable.
- Include the core elements of a healthy dietary pattern to meet food group needs. The core elements include all types of vegetables; fruit, especially whole; grains, at least half of which are whole grain; low-fat or fat-free dairy and/or fortified dairy alternatives; a variety of lean protein foods including beans, peas, lentils, nuts, and seeds; and oils like vegetable oil and oil from food (e.g. seafood and nuts).
- Limit added sugars, saturated fat, sodium, and alcoholic beverages. Aim for less than 10 percent of calories per day from added sugars and saturated fats. Those 2 years old and younger should not be served food and beverages with added sugars. Limit sodium to less than 2300 milligrams per day. Adults of legal drinking age who are not pregnant should limit alcohol intake to 2 drinks or less in a day for men and 1 drink or less in a day for women.


Further food for thought
The 2020–2025 edition rejects the Dietary Guidelines Advisory Committee’s (DGAC) evidence-based recommendations to reduce sugar consumption to 6 percent instead of 10 percent, and to limit alcohol intake to one drink a day for both men and women. Read more about this decision at https://www.dietaryguidelines.gov/about-dietary-guidelines/related-projects/usda-hhs-response-national-academies-sciences-engineering.

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[Image: HomeGrown Gardens logo] it’s Bare Root planting time! Grow more edibles! Choose from our selection of bare root fruit trees, strawberries, rhubarb & much more!

http://extension.oregonstate.edu/linn
By Susan Hoffman, Master Gardener Volunteer and Oregon Season Tracker

Oregon Season Tracker (OST) links volunteers, natural resource managers, educators, and researchers to the science they use. Master Gardener Volunteers like Susan cross-train as Oregon Season trackers and contribute to the understanding of weather, climate and their effects on our local environment by reporting precipitation and seasonal plant changes.

After slipping on my boots, trudging down our slope at 7 a.m. each day, carrying my umbrella over my bathrobe, and heading to the lower garden where we have placed our gauge, I have been very curious about just how much water we have been getting in a week’s time on the eastside of Vineyard Mountain. We have all noticed the nights of beating rain on our roof and the muddy soil, but now I have an exact amount. In the last week, our family has collected 5.47 inches of rainwater. This is the greatest amount over a week’s time since we became part of the Oregon Season Trackers in November of 2017.

Besides the science of measurement, I have immersed my senses in the morning garden, made my mental list of garden tasks, enjoyed the morning quiet or the chatter of my occasional grandson sidekick, who likes to pour the water out and carry the number in his head all the way back to the house to inform the household of the number to be written in our garden notebook. We also are noting the long, dry spells when Oregonians get cranky, releasing a sigh of relief after the rain begins. There have been a lot of .0’s this last spring and summer.

I highly recommend this activity as part of your garden routine, adding knowledge of the natural world and contributing to science both locally and nationally.

In addition to the rain gauge, an equally important part of Oregon Season Tracker Program is monitoring plant phenology. Volunteers choose one or more plants from a list of priority species. An example might be a Vine Maple which is then observed thru all the stages of plant growth from dormancy thru fruiting and seed drop. Reporting is done at each stage and differences noted can be remarkable even in a local area. All data is collected and used to see and document patterns in climate and environment, and how they change over time.

The Season Tracker Coordinator is Jodi Einerson, located at Benton County Extension. She is most happy to talk with people interested in joining, and can be reached at her email, jody.einerson@oregonstate.edu. Like most Extension Staff she is primarily working from home.

There are two websites to visit if you are interested in these two projects: https://extension.oregonstate.edu/ost including a new improved plant phenology photo gallery page, and https://extension.oregonstate.edu/ost/educational-photo-galleries

Right now the training is entirely online. People register using a button on the website “Become an Observer” page. They have an online portion, and then take a one-hour Zoom session. The fall Zoom sessions have gone over who the Oregon Season Trackers partners are, the placement of the CoCoRaHS (Community Collaborative Rain Hail and Snow Network) rain gauge, protocols, picking plants to observe, and Q&A.

The Oregon Season Tracker training is at no charge, both the online and the Zoom sessions. Participants need to order and pay for their own CoCoRaHS approved rain gauge. The price varies, but right now they can be purchased for $32.75, plus postage. Jodi has sources on the website and in the online training.

After joining Oregon Season Tracker, you will get a station number used to report your observations, and that number is used to track the impact of this program in Oregon. If people just want to do the rain gauge and not the plant phenology observations that is okay. But observing plants fits right in with a Master Gardeners interest and makes the process even better! I have been doing this for three years and I am still engaged and learning. And my long-term reporting is especially helpful to climate science researchers.

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The Comfortable Choice
March-April Gardening Calendar for Western Oregon

The Oregon State University Extension Service encourages sustainable gardening practices.

We emphasize preventive pest management over reactive pest control. Identify and monitor problems before acting and opt for the least toxic approach that will remedy the problem. Favor biological control agents (predators, parasitoids) over chemical controls.

Use chemical controls only when necessary and only after thoroughly reading the pesticide label. Consider cultural first, then physical and biological controls. Choose the least-toxic options (insecticidal soaps, horticultural oils, botanical insecticides, and organic and synthetic pesticides—when used judiciously).

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.

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**MARCH**

**Planning**

- Plan your vegetable garden carefully for spring, summer, and fall vegetables that can be eaten fresh or preserved. If you lack in-ground gardening space, plan an outdoor container garden.
- Use a soil thermometer to help you know when to plant vegetables. Some cool season crops (onions, kale, lettuce and spinach) can be planted when the soil is consistently at or above 40 degrees Fahrenheit.

**Maintenance and clean up**

- Lawn mowing: Set blade at 0.75 – 1 inch for bentgrass lawns; 1.5 – 2.5 inches for bluegrasses, fine fescue and ryegrasses.
- Compost grass clippings and yard waste, except for clippings from lawns where weed- and feed-products or weed killers have been used.
- Spread compost over garden and landscape areas.
- Prune gooseberries and currants; fertilize with manure or a complete fertilizer.
- Fertilize evergreen shrubs and trees if needed. If established and healthy, their nutrient needs should be minimal.
- If needed, fertilize rhododendrons, camellias and azaleas with acid-type fertilizer. If established and healthy, their nutrient needs should be minimal.
- Prune spring-flowering shrubs after blossoms fade.
- Fertilize caneberrys using band fertilizer, broadcast fertilizer, a complete fertilizer or manure.

**Planting and propagation**

- Divide hosta, daylilies and mums.
- Use stored scion wood to graft fruit and ornamental trees.
- Plant insectary plants such as alissum, phacelia, coriander, candytuft, sunflower, yarrow and dill to attract beneficial insects to the garden. For more information, see Encouraging Beneficial Insects in Your Garden.
- If soil is dry enough, prepare vegetable garden and plant early cool-season crops (carrots, beets, broccoli, leeks, parsley, chives, rhubarb, peas and radishes). Plant onions outdoors as soon as the soil is dry enough to work.
- Plant berry crops (strawberries, raspberries, blueberries, blackberries, currants, gooseberries and other berry-producing crop plants). See OSU Extension publications for berry varieties.

**Pest Monitoring and Management**

Use chemical controls only when necessary and only after studying 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.

- Spray trees and shrubs for webworms and leafrollers, if present.
- Protect new plant growth from slugs. Least toxic management options include barriers and traps. Baits are also available for slug control; use with caution around pets. Read and follow all label directions prior to using baits or any other chemical control.
- Learn to identify the predatory insects that can help keep aphids and other pests under control.
- Spray to control leaf and twig fungus diseases in dogwood, sycamore, hawthorn and willow trees.
- Prune ornamentals for air circulation and to help prevent fungus diseases.
- Start rose blackspot control tactics at budbreak. Control rose diseases such as black spot. Remove infected leaves. Spray as necessary with a registered fungicide.
- Monitor for European crane fly and treat lawns if damage has been verified.
- Monitor landscape plants for problems. Don’t treat unless a problem is identified.

**Indoor Gardening**

- Trim or shear heather when bloom period is finished.
- Start tuberous begonias indoors.
- Take geraniums, begonias, and fuchsias from storage. Water and fertilize. Cut back if necessary. Move outdoors next month.

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**APRIL**

**Planning**

- Write in your garden journal throughout the growing season.
- Prepare garden soil for spring planting. Incorporate generous amounts of organic materials and other amendments, using the results of a soil analysis as a guide.
- Prepare raised beds in areas where cold soils and poor drainage are a continuing problem. Incorporate generous amounts (at least 2 inches) of organic materials.
- Use a soil thermometer to help you know when to plant vegetables. When the soil is consistently above 60 degrees Fahrenheit, some warm season vegetables (beans, sweet corn) can be planted.

**Maintenance and clean up**

- Allow foliage of spring-flowing bulbs to brown and die down before removing.
- Apply commercial fertilizers, manure or compost to cane, bush (gooseberries, currants, and blueberries), and trailing berries.
- Place compost or decomposed manure around perennial vegetables, such as asparagus and rhubarb.
- Cut back ornamental grasses to a few inches above the ground.
- Cover transplants to protect against late spring frosts.
- This is an optimum time to fertilize lawns. Apply 1 pound nitrogen per 1,000 square feet of lawn. Reduce risks of runoff into local waterways by not fertilizing just prior to rain, and not overirrigating so that water runs off the lawn and onto the sidewalk or street.
- De-thatch and renovate lawns. If moss has been a problem, scratch the surface before seeding with perennial ryegrass.
- Prune and shape or thin spring-blooming shrubs and trees after blossoms fade.

**Planting/propagation**

- Plant gladioli, hardy transplants of alissum, phlox and marigolds, if weather and soil conditions permit.
- It’s a great time to start a vegetable garden. Among the vegetables you can plant, consider:
  - Broccoli, Brussels sprouts, cabbage, carrots, cauliflower, chard, chives, endive, leeks, lettuce, peas, radishes, rhubarb, rutabagas, spinach and turnips.

**Pest monitoring and management**

- Clean up hiding places for slugs, sowbugs and millipedes. Least toxic management options for slugs include barriers and traps. Baits are also available for slug control; use caution around pets. Read and follow all label directions prior to using baits or any other chemical control.
- Monitor strawberries for spittlebugs and aphids; if present, wash off with water or use insecticidal soap as a contact spray. Follow label directions.
- If necessary, spray apples and pears when buds appear for scab. See Managing Diseases and Insects in Home Orchards.
- Cut and remove weeds near the garden to remove potential sources of plant disease.
- Use floating row covers to keep insects such as beet leaf miners, cabbage maggot adult flies, and carrot rust flies away from susceptible crops.
- Help prevent damping off of seedlings by providing adequate ventilation.
- Manage weeds while they are small and actively growing with light cultivation or herbicides. Once the weed has gone to bud, herbicides are less effective.
- Spray stone fruits, such as cherries, plums, peaches and apricots, for brown rot blossom blight, if necessary.

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http://extension.oregonstate.edu/linn
Growing Oregon Gardeners: Level Up Series

Take your gardening knowledge to the next level with timely topics from gardening in a changing climate to techniques to extend your season.

The webinars will be broadcast via Zoom, the second Tuesday of the month, at 3 p.m., January through November, 2021. Afterwards, recordings of each webinar will be posted on the website.

This series is open to the public, and OSU Extension Master Gardener volunteers receive 1 Continuing Education Credit for each class taken. You can take one, or take all. Cost is free. Registration for each individual webinar is listed with their description below. Registration is opened 3 months prior to the event.

- March 9: Dirt gone bad: When your soil amendment has been contaminated
- April 13: Dazzling Dahlias
- May 11: Water-wise Gardening

See more upcoming classes and enroll FREE: https://beav.es/Js1
OSU Extension Offices Provide Free Nitrate Screenings

The OSU Extension Service is offering free well water nitrate screenings for well owners. While it is especially important for households with pregnant women or newborns to test for nitrate because of a rare type of blue-baby syndrome, all homes with private wells should be aware of their nitrate level. New research suggests nitrate may also contribute to increased risks of some cancers and be linked to reduced oxygenation of blood.

Part of Linn, Benton, and Lane counties are within the Southern Willamette Valley Groundwater Management Area (GWMA). This area was designated as such due to increase nitrate levels in groundwater supplies. Nitrate levels can vary over time and should be screened for at least once per year.

For a free nitrate screening, bring 1/2 cup of untreated well water in a clean, water-tight container to one of the Extension Service offices listed. Choose a container that you are comfortable not getting back and clearly mark your contact information on it, just in case one of our trained testers is not in. Due to our COVID-19 protocols you MUST make an appointment with the office you want to have the test done at. Masks are required in our buildings. The test takes about 10 minutes to complete once you arrive.

Benton County 541-713-5000
Located at 4077 SW Research Way, Corvallis, OR 97333

Lane County Office 541-344-5859
Located at 996 Jefferson Street, Eugene, OR 97402

Linn County Office 541-967-3871
Located at 33630 McFarland Road, Tangent, OR 97389

Marion County Office 503-588-5301
Located at 1320 Capitol St NE, Suite 110, Salem, OR 97301

Polk County Office 503-623-8395
Located at 289 E Ellendale, Suite 301 Dallas, OR 97389

For additional information on well water and septic systems, free Rural Living Basics classes, and other nitrate screening events, visit the OSU Extension Service website at http://wellwater.oregonstate.edu, or for more information e-mail well.water@oregonstate.edu or call 541-713-5009.

Free Well Water Testing for Wildfire-Impacted Domestic Wells

The Oregon Health Authority will provide free well water testing vouchers to private or “domestic” well users impacted by the 2020 Oregon wildfires. Applications will be open from February 1 - May 15, 2021 at https://go.usa.gov/xAycC.

Vouchers cover the cost of testing for bacteria, nitrates, arsenic, and lead. Depending on well damage, some may also qualify to test for benzene, toluene, ethylbenzene, and xylene as well. Sample collection costs are not covered by OHA.

Voucher Eligibility:
All of the following criteria must be met:
- The property was impacted by the 2020 Oregon wildfires
- The well water is used for things like drinking, bathing cooking and washing dishes
- The well has 3 or fewer connections and is not part of a regulated water system

Priority:
If demand exceeds supply, OHA will prioritize vouchers for:
- Households that meet certain income thresholds
- Communities that have been historically underserved, including people of color
- Properties that had the greatest damage

Second homes or vacation rental homes will not be prioritized, but may qualify.
Contact domestic.wells@dhsoha.state.or.us or call 971-673-0440 for questions.
Are You Connected?

By Teagan Moran,
OSU Extension, Small Farms Program

Our regional Small Farms Program (Linn, Lane, Benton Counties) has a variety of ways for you to connect with us, receive information, and to connect with the small farm community in your area. Whether you want to keep up to date on educational and funding opportunities or connect with other land stewards and farmers in your area, we have options. Ways to connect and how to sign up include:

Monthly E-newsletter: We compile resources and share updates once a month through an emailed newsletter. This monthly communication includes upcoming workshops, funding opportunities, new resources, and a classifieds section. We share OSU Extension programs as well as those of partner organizations. Sign up link: https://beav.es/JWB

Regional Email Listserv: For Linn, Benton, and Lane Counties. Receive timely emailed communications regarding workshops, jobs, funding opportunities and more. This is a two way communication option, you can also email the listserv yourself to ask a question, sell farm equipment, post a job opportunity, or organize over a particular topic. To join email Teagan.moran@oregonstate.edu. Listserv is monitored to assure safety and relevance.

Willamette Women’s Farm Network (WWFN): The WWFN Mission Statement is: Sharing, Learning, Growing Together. We are a community of women from the Willamette Valley of Oregon that are actively engaged in farm and ranch activities. We join together to further our knowledge of farm and ranch related issues both in the market place and in agricultural practices. We are working together to enhance our economic self-sufficiency through shared experience, resources, and visions of how our farm work will impact ourselves and our community. We provide each member a safe, supportive environment and opportunity to learn farming/ ranching that promotes responsibility, profitability and conservation of the land. WWFN has a directory, email listserv for communications, and a Facebook page. Listserv is monitored to assure safety and relevance. To join email Teagan.moran@oregonstate.edu

Statewide Military Veterans Email List: For Military Veterans in Oregon who are exploring the farming path. This two way communication option provides a space to share statewide events and resources relevant to Veterans. You can also email the list serv yourself to ask a question, sell farm equipment, post a job opportunity, or organize over a particular topic. To join email Teagan.moran@oregonstate.edu. Listserv is monitored to assure safety and relevance.

Statewide Small Farms Quarterly News: 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

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

To subscribe to Small Farm News email: smallfarmsprogram@oregonstate.edu

If you want to explore any of these options in more detail, we are always available to talk about our program, where you are in your farming path, and how we can help. We explore possibilities and help to address problems! Teagan.moran@oregonstate.edu or call 541-713-5011.
How are Undies and Soil Connected?

By Teagan Moran, OSU Extension, Small Farms Program

I had the unusual joy of passing on a pair of cotton underwear (new, not mine, and provided by the USDA National Resource Conservation Services NRCS) to a farmer, Rosie Sweetman of Little Wings farm, at a meeting last year. With the underwear came an invitation to participate in the Soil Your Undies Campaign. The campaign was created by Oregon farmers, working with their local Soil and Water Conservation Districts (SWCDs) and NRCS, as a fun way to build public interest in soil health. It was with great joy that a season later I was able to see this post on Little Wing’s Facebook page https://www.facebook.com/littlewingsfarm:

Details shared from the NRCS Website https://www.nrcs.usda.gov/wps/portal/nrcs/detail/or/soils/health/?cid=nrcseprd1470410

Chewed-up, ripped, torn, threadbare, riddled with holes, completely, utterly soiled--the undies in Oregon’s farm country are falling to pieces. And that’s just the way farmers like it.

Whether you’re on crop, range or forestland, the quick and dirty way to test your soil health is by “planting” a pair of new, cotton underwear in the site you’re curious about. Wait at least 60 days, then dig them back up. The more the undies are deteriorated, the healthier your soil.
• Plant a pair of new, cotton underwear horizontally about 3 inches deep in the site you’re curious about. Don’t forget to mark the spot you planted!
• Wait at least 60 days. This gives your soil microbes time to do their magic! Then dig the undies back up.
• Share your results by sending us a photo of your “harvest” and a little information about your operation to orinfo@nrcs.usda.gov.

We’ll put your undies on the map, literally! Submissions will be included on our Soil Your Undies Challenge Tracker so you can show your neighbors and other Oregon producers just how healthy your soil is.

Soil Testing a Vital Component of Crop Production

As described in A Guide for Collecting Soil Samples for Testing, without a soil analysis, it’s nearly impossible to tell what your soil needs to help your crop grow. A laboratory soil analysis, or a soil test, provides information on the capacity of your soil to supply adequate nutrients. This helps you select the correct mix of fertilizer and liming materials, which can help you to develop and maintain your soil and increase crop production.

When do you test your soil? Producers often test in the fall because the soil is moist for easy sampling, and they can then have time to order amendments and apply before their spring planting needs. That being said, soils can be sampled now, and many local farms are doing just that!

Below are three resources that will help guide your soil testing process. Pricing will vary depending on the lab and your testing needs, OSU is one of the options. The list of Analytical Labs breaks down which labs offer which tests, as well as offering recommendations for making a decision. The Soil Test Interpretation Guide will help you to best understand and respond to the results.
• A Guide for Collecting Soil Samples for Testing https://catalog.extension.oregonstate.edu/ec628
• Analytical Laboratories Serving Oregon; https://catalog.extension.oregonstate.edu/em8677
• Soil Test Interpretation Guide https://catalog.extension.oregonstate.edu/ ec1478

To dive deeper into Soil and how to improve it, I highly recommend you check out Building Soils for Better Crops https://www.sare.org/resources/building-soils-for-better-crops-3rd-edition/

This FREE publication put out by Sustainable Agriculture and Research Education (SARE) provides step-by-step information on soil-improving practices as well as in-depth background—from what soil is, to the importance of organic matter. Case studies of farmers from across the country provide inspiring examples of how soil—and whole farms—have been renewed through these techniques.
South Valley Field Crops
Extension Coffee Hours
Tune into zoom Wednesday mornings at 8:00 a.m. for a new topic every week
• Get up to date on recent and ongoing research at OSU
• Meet the new field crops extension agent for the south Willamette Valley
• Make sure the south valley field crops extension program is working for you

Date  Topic                  Presenter
3/3   New technologies       Christy Tanner will discuss the use of drones in Agriculture
3/10  Vole control           Jimmy Taylor will talk about his research project on the effectiveness of vole bait.
3/17  Soil health practices  Betsy Verhoeven and Kristin Trippe will cover on-going soil health studies
3/24  Grass weed control     Caio Brunharo and Andy Hulting will cover current work on weed control

Register at https://beav.es/JdR

South Valley Field Crops
Notes March/April

General Management
• Seed certification: The deadline for Crop Inspection Signups is April 15.
• Keep up on slug monitoring efforts throughout the rest of winter and into spring. Be especially mindful of spring planted crops and bait pre-plant if needed. Remember the optimal baiting conditions: moist soil, overcast skies, no wind or rain.
• Scout for vole activity and spot treat with zinc phosphide down holes according to the label.
• Scout for aphids and cereal leaf beetle in wheat and grass seed fields through May.
• As temperatures warm, prevent phenoxy drift problems by using less volatile formulations, drift reduction nozzles, and good spraying practices.
• Watch for leaf spot diseases in brassica crops, including turnip

The Elusive “Average” Crop Year

By Christy Tanner, South Valley Field Crops faculty

For anyone who makes their living from the land, the weather is an important topic of conversation. Crops, weeds, and pests develop faster or slower, depending on the weather in a given year. One way to better predict crop and pest development is by tracking the accumulation of growing degree days (GDD), or heat units.

The number of GDD accumulated on a given day is the average of the high and low temperatures for that day, minus a base temperature (the lowest temperature that the crop of interest can grow at). For grass seed, we use temperatures in degrees Celsius, with a base temperature of 0°C (or 32°F), but other crops can use slightly different formulas. Starting on January 1st, each day’s GDD are added to the total.

The timing of crop growth stages, and the optimum time for certain management activities can be predicted with reasonable accuracy. For example, the best time to apply nitrogen fertilizer to perennial ryegrass seed crops in the spring is after 200 GDD have accumulated. Fertilization of tall fescue can start earlier, with forage types starting at 160 GDD and turf types at 180 GDD. These GDD accumulations mark the time when cool season grasses are just starting their spring growth. Nitrogen uptake is negligible before this point in the season, but starts to increase as growth speeds up in the spring.

Putting nitrogen fertilizer out in the field before the plants will use it means it can be washed away and lost in the Willamette Valley’s rainy winters. If crops don’t have enough Nitrogen when they need it, they can’t make up for it by increasing uptake later in the season. For tall fescue, nitrogen applications should be completed by mid-March, and applications to perennial ryegrass should be completed by mid-April.

So how does this year compare to an “average” year? To answer that question, I downloaded the past 30 years of weather data from the weather station at the Hyslop Crop Science Field Research Laboratory located northeast of Corvallis. This year we hit 200 GDD on January 31st, about 5 days earlier than the average of the last 3 decades.

On the graph below, you can see that many years tend to wander around a bit – the line gets steeper during a warm spell, then flatten out during a cold snap. None of these years looks much like the smooth line of the average year. So far, this year was quite warm through mid and late January, but with cooler temperatures in early February, and more cold temperatures forecast as I write this article, the year is moving closer to average.

Accumulation of growing degree days over time for the past 30 years from the Hyslop Farm weather station. The available data for 2021 is shown in red. Years 1991 to 2020 are shown as gray lines, and the black line is the average of the past 30 years.
Low Tunnels to Extend Harvest Window for Strawberries

By Erica Chernoh and Javier Fernandez-Salvador

In 2019, we began a trial at the North Willamette Research and Extension Center (NWREC) in Aurora, Ore., to study the use of low tunnels to extend the harvest window of day-neural strawberries in Oregon as part of the Oregon legislature “Berry Initiative”.

Day-neutral strawberries differ from the widely grown Oregon June-bearing cultivars in that they respond more to temperature to flower rather than photoperiod. Day-neutral strawberries flower and fruit when temperatures are between 40- and 90-degrees Fahrenheit with the right amount of light which can include reduced sunshine in the fall and early spring. The typical harvest window in Oregon for day-neutral strawberries is from June through August but this can be expanded with the use of protective structures such as low tunnels.

Low tunnels utilize long sheets of clear plastic to cover a single strawberry bed. The plastic has a greenhouse effect in that it increases the temperature inside the tunnels. The objective of our trial was to study the effect that the conditions created by the low-tunnels had on plant growth, yield, and harvest season extension for three commonly grown day-neutral cultivars (“Seascape”, ‘Albion’, and ‘Sweet Ann’). For this study, the strawberries were grown under two types of plastic, slitted 0.8-mil clear plastic designed to self-ventilate and solid 4-mil clear plastic with UV stabilizers, and were compared to strawberries grown in an open bed with no tunnel.

Data from 2020 is still being analyzed but results from the 2019 and 2020 the trial show that low tunnels increased the temperature in the early (March–April) and late–season (October–November) as well as cumulative plant yield when compared to open beds. During the late season, average air and soil temperatures were greater under solid plastic compared to slitted plastic, and greater under slitted plastic compared to open beds. These results demonstrate the ability of low tunnels to increase temperatures, and subsequently extended the flowering and fruiting period in day-neutral strawberries. Low tunnels also increased the late–season Marketable yield under both solid and slitted plastic compared to open beds (44, 17, and 3g/plant, respectively), with solid and slitted plastic increasing late–season Marketable yields by 174% and 146% compared to open beds. While Seascape produced a higher marketable yield during the summer season, Sweet Ann and Albion outperformed Seascape’s yield during the late season (26, 24, and 13.6 g/plant, respectively).

Preliminary results of this trial demonstrate the ability of low tunnels to extend the harvest season in Oregon from September into late fall in 2019 and similar results in spring and fall in 2020 (data under analysis), and increase temperatures and fruit yield during this extended season. The benefit goes beyond extending the length of time to pick fruit but also providing the conditions manipulate the plant with pruning to focus the harvest times outside of the peak season, when market competition is lower and prices higher. This technique is being studied in detail in future trials. Next steps for this study include completing the analysis for 2020 trial data, and conducting on–farm research with growers in the Willamette Valley in 2021. If you have interest in learning more about the low–tunnel trial, please contact me at erica.chernoh@oregonstate.edu or (541) 344–1709.
Get Serious about Weed Control: Identification, Mapping, Calendar Notes

By Shelby Filley, Regional Livestock and Forage faculty

Weed ID

The best place to start on weed control is with weed identification. It is very important to positively ID a weed so that appropriate control methods can be used. With so many weeds, ID can seem overwhelming, but it is not very difficult. If you have a lot of property, you should learn to ID weeds yourself. If you have only a small amount of land, you can rely on others to do the weed ID for you. In both cases, you can get assistance from OSU Extension Service.

Begin by careful observation of the plants in your field. Get to know what belongs there and what is out of place. Soon you will recognize the different weeds by sight. Purchase the book “Weeds of the West,” and look through it. You may recognize your weeds in the book, and thus, have their name and growth characteristics. Learn to recognize the weeds at different stages of growth. It may be easier to recognize a plant when it is in flower, but this is not always the best time for control, as control methods work differently at different stages of a weed’s lifecycle.

Try taking some high-quality digital photographs of individual weeds. Get some close-up shots of the leaves, stems, buds or flowers, and roots. Also, get a picture of the whole weed where it is growing. Email the photos to the Extension Service faculty responsible for the site (livestock pasture, woodlot, garden, row crops, orchards, etc.).

You may be able to bring a weed sample into the Extension office. Call before coming in so we can arrange a drop off. It is important to bring a well-kept, representative sample. Collect the entire plant, if not too large, roots to flowers, and place it in a bag. If the plant is fresh and green, wrap the root end in a slightly moist paper towel and place it in a plastic baggie; one sample per bag. If the plant is dry, keep that in a separate paper bag. Try including dried flowers or seed heads from last year’s growth.

Weed Mapping

It is important to note the location of weeds so you can go back for control and monitoring purposes. You can use some small flags to mark the sites. However, sometimes livestock eat your flags. Sigh! It is best to use maps; a hand-drawn map to assist you with small areas or an aerial map for large acreage sites. I like to use the Web Soil Survey, the Natural Resource Conservation Service system for mapping ranches or farms with several different fields or a large single-field unit. See https://websoilsurvey.sc.egov.usda.gov/ and follow the directions there for mapping your farm. Or, see https://extension.oregonstate.edu/crop-production/pastures-forages/using-soil-type-estimate-potential-forage-productivity for step by step directions and for tips on how to use the program for other purposes, such as measuring acreage and estimating potential forage productivity.

The Oregon Department of Agriculture is responsible for noxious weed control and has an online program called the Oregon WeedMapper. This program is a collection of spatial information on the distribution of noxious weeds. The tool enables you to display individual noxious weed species, multiple weed species simultaneously, and all known noxious weed species; change the style of map background; measure distance, area, and determinate latitude and longitude; create your own shapes and text to illustrate the map; and print and display maps for presentations. Find it at https://www.oregon.gov/oda/programs/Weeds/Pages/AboutWeeds.aspx.

Weed Calendars

Scout for weeds at different times of the year. Use old or extra calendars to note the day or week you find the weeds. Also, note the growth stage of the individual weeds you find. Growth stages include germination or seedling, rosette stage, bolting stage, bud stage, bloom stage, and post bloom or having gone to seed. Keep that calendar to help you with timing of weed control over the coming years. For example, soon several species of mustard weeds will be rapidly growing. This would be the time to apply pesticides or other control measures.
Coordinating Seedling Production for Areas Affected by 2020 Wildfires

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

Among the many challenges facing landowners affected by the 2020 wildfires will be reforestation. One of the top issues will be tree seedling availability: Seedlings are in very short supply now, and it is likely to remain that way for several years.

The shortage is partly a demand issue. The wildfires affected about 350,000 acres of private forestland to varying degrees. That includes 70,000 acres owned by about 1,000 family forest landowners. This means about four million additional seedlings are now needed above the expected demand created by regularly planned harvest and reforestation. Everything that is currently in the production pipeline has already been absorbed.

The shortage will also be a production issue. There are limits to how quickly seedlings can be grown (typically 1-3 years) and most importantly, there are limits on capacity at every step in the production & planting process, such as greenhouse space, nursery workers, and cold storage. Clearly, a coordinated approach is needed to address this.

OSU Extension is working with the Oregon Department of Forestry, Oregon Small Woodlands Association, nursery producers and other partners to develop extra capacity needed to produce, deliver, and plant seedlings in response to this problem.

Issues to be addressed include:

• Determining the need for seedlings (by area, elevation, species).
• Nursery production capacity, which may be limited by both infrastructure and labor.
• Storage and distribution logistics.

• Planting labor force capacity

At this time, we are still trying to measure and map the need for seedlings. If you are a landowner affected by the 2020 wildfires needing to plant trees in the future (or know someone who is), we want to hear from you. Please follow this link https://beav.es/seedlings and fill in our seedling needs survey. This will put on you a mailing list and we will get back in touch with you with details as they develop.

If you need help with this, please contact the Linn County Extension office 541-248-1088, or email Laurie.Gibson@oregonstate.edu.

Fire Program Team Now Complete

By Brad Withrow Robinson, OSU Forestry & Natural Resources Extension

As reported here earlier, OSU Extension Service has a new statewide fire program to help create a better understanding of fire through education and outreach efforts. The program has six regional fire specialist positions to work with partners to help facilitate large-scale, cross-boundary management practices. Four regional fire specialists came on board last fall - Chris Adlam (Southwest), Ariel Cowan (Central), Amanda Rau (Willamette and Cascades) and Katherine Wollstein (Southeast), and the final two arrived just last month! Here is the rest of the roster.

Aaron Groth joins us as Regional Fire Specialist for the Coast Fire Service Area based in Astoria. Aaron joins us from the University of Texas in Austin, where he was a Graduate Fellow in the Department of Geography and the Environment, focused on landscape ecology and management, forest conservation, biogeography, and integrated watershed studies. Aaron is a former Peace Corps Volunteer, and worked in the areas of agroforestry and reforestation in the Andes Mountains of Peru. He later served as Environmental Management Volunteer Coordinator, and as a Community Conservation Specialist for the Upper Amazon Conservancy (Peru). Aaron has extensive experience working with indigenous communities and is fluent in Spanish.

Aaron’s service area includes the Coast Range bordering the Willamette Valley. Aaron will join a local team including fire specialist Amanda Rau, and county agents Glenn Ahrens, Lauren Grand and Brad Withrow-Robinson.

John Rizza joins us as Regional Fire Specialist for the Northeast Fire Service Area based in LaGrande. John was recently Ranch Manager in Terrebonne, Oregon, where he managed a 1700 acre property including active forestry and agricultural operations. He brings a mix of professional Ag and Forestry positions in the West, including seven years with the Colorado State University Extension Service, and credentials as a Wilderness First Responder, a Certified Ecological Restoration Practitioner, Type 2 Wildland Firefighter.


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

We learned in September 2020 that everyone living in western Oregon needs to be prepared for a wildfire emergency.

OSU Extension, along with state and local agencies and community partners, will be launching the Fire Aware, Fire Prepared campaign beginning in spring 2021. Over the next two years, this statewide campaign will help Oregonians prepare for the reality of wildfire through

Continued on Page 20
4-H Summer Camp

Unfortunately, due to the continued COVID-19 risk status, we will not be hosting our Four Rivers 4-H Camp this year. We know how important camp is to many people, and we promise to share any camp opportunities as they arise. We thank everyone for helping to decrease our risk level, in our county and in the state by doing their part to keep Oregonians healthy.

4-H Members Thrive by Having a Hopeful Purpose

“Purpose is the stable and generalized intention to accomplish something that is at the same time meaningful to the self and consequential for the world beyond the self”. William Damon, Ph.D. Stanford Center on Adolescence Stanford University

Thriving youth have a sense of hope and purpose and see themselves on the way to a happy and successful future.

Having hope and a sense of meaningful purpose in life is an important part of positive youth development. Research shows that youth with a sense of purpose are more goal-directed, and have increased life satisfaction, better emotional well-being, and greater positive affect. Additional research has shown that identity formation, which is one of the key parts of healthy adolescent development and having a sense of purpose are connected – in fact, hope and purpose appear to come from one’s sense of identity. From childhood through adolescence, 4-H can play a big role in developing hope and purpose in youth!

Encourage youth to set meaningful goals and develop plans for achieving them

Show youth a pathway to the future

Empower youth voices and show how they can make a difference in the world

Help youth identify their unique gifts and talents and how they can use them to make the world a better place for others

This information is based upon information derived from “The 4-H Thriving Model.” The model was created by Dr. Mary E. Arnold, Program Director I Youth Development Research and Practice, National 4-H Council and Professor and Youth Development Specialist with the Oregon 4-H Program.

The model aims to look more closely at the ways in which 4-H contributes to the positive development of youth. The model outlines the ingredients of a high quality 4-H program and how high-quality programs help youth participants thrive and achieve key developmental outcomes. For more information about “The 4-H Thriving Model” visit: https://health.oregonstate.edu/thriving-model

When working with 4-H youth:

Help youth identify their “sparks.” Sparks are a key source of hope and purpose for many youth.

Actively facilitate the development of a young person’s spark.

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.
4-H Continues Virtually

For many 4-H members, this time of year means a plethora of contests and events to participate in. Covid-19 has put a damper on these events as 4-H in Benton County continues to be restricted to virtual programming. The current 4-H members have learned to be flexible and resilient beyond what they believed possible and have learned to adapt to a digital world until restrictions are lifted and they are able to return to in-person programming. Despite the different format, youth continue to show that resilience and even thrive when participating in virtual activities with their peers and mentors. These contests and events offer skill building, time to bond with peers, and open the doors for larger opportunities. Down the road, participation in these events will help 4-H members who keep record books to qualify for college scholarships and other state and national opportunities such as State 4-H Ambassadors and National 4-H Congress.

Upcoming Contests:
4-H Presentations Contest – March 3rd & 4th
4-H members can give a speech, illustrated talk, demonstration, or impromptu presentation for a judge over Zoom. Along with the public speaking skills development, youth learn to interview with a judge, practice their technology communication, time management, and more. This contest is a qualifying event for several larger opportunities including the State 4-H Presentations Contest, 4-H Spring Classic, and even some national contests.

4-H Spring Classic Qualifying Contests
The 4-H Spring Classic is one of the key state events that gives youth the chance to demonstrate their knowledge about their horse, livestock, small animal, dog, family and consumer science, and shooting sports projects. 4-H Spring Classic was originally a horse project event, but it ended up being a great venue for multiple projects. It was expanded several years ago to provide a fun and competitive platform for youth to give presentations, judge their respective project area, and more.

The Western Region (Benton, Lane, Linn, Marion, Polk, and Yamhill) have teamed up to lessen the load per county. Counties are taking on individual project focuses to create regional qualifying contests for each of the 4-H Spring Classic focuses so that teams from each county can qualify. These contests are spread throughout the Spring before May when the state contest is held.

4-H Food Preparation Contest – April 10th
The 4-H Food Preparation Contest features 4-H members creating a dish in front of a judge. The judge will consider their table setting, the taste of the dish, the youth’s knowledge about their dish, and the skills demonstrated during the cooking process. This year, to accommodate for the judge not being able to taste the dish, the youth will need to have full knowledge of what their dish should taste like and, if it didn’t turn out the way it was supposed to, what could be fixed the next time they attempt it. The judge will still have a full view of the youth cooking, but from the comfort of their own kitchen.

To prepare themselves for this contest, the 4-H members will have had the opportunity to participate in the 4-H Favorite Foods Contest held in February. In this virtual contest, the youth simply has to have a prepared dish and table setting ready for their interview time with a judge over Zoom.

4-H Fashion Revue – April 24th
4-H members who participated in the 4-H Fashion Revue last year will already be familiar with the Zoom format for this contest. Participants sign up for any of the following classes:

1) Construction (sewing a garment)
2) Ready to Wear (creating and outfit within a set budget)
3) Recycled Garment (county only class using something for a different purpose than intended or reusing an item in a new way)
4) Timed Challenge (county only class much like impromptu presentations where the judge will give a theme to the youth to create an outfit from their closet in a set time)

All of these classes will feature the youth modeling their outfit in front of a judge over Zoom followed by an interview.

Through all of these opportunities, youth continue to grow in their projects and bond with other youth and mentors outside of their family. It may not be ideal to be virtual, but these types of events can help provide an outlet for youth that is critical for maintaining mental health as restrictions continue.

The Benton County Extension office is here to help answer any questions about these contests or others regarding 4-H.

Become a 4-H Volunteer!

Volunteers help make 4-H possible. To volunteer, previous 4-H Youth Development experience is not necessary. The most important qualifications are:

- a desire to work with young people to help them learn new things and gain life skills; and
- providing youth positive experiences in a safe and welcoming environment.

Extension volunteers work with staff to deliver educational programs extending University resources. The next virtual volunteer training, via Zoom is on January 21, 6-9 p.m. Registration required. For more information and an application to volunteer, contact the Benton County Extension Office.

Benton County Hosts Virtual Resource Showcase for 4-H Volunteers

Now that virtual learning has become the norm during the pandemic, our 4-H Team created an opportunity to share and showcase resources that can be used with 4-H members to deepen their understanding on their respective project areas.

Fun and interactive educational games were created using the Kahoots! platform to explore animal science knowledge ranging from biosecurity, parts of an animal, breeds, diseases, etc. Additional Kahoots! will be developed for family and consumer science, shooting sports, and STEM. Other games that can be played over virtual formats, such as jeopardy and mock auctions, have been developed and shared as part of this effort to create a library of virtual resources for 4-H clubs as well.

Ultimately during this past year, Oregon 4-H has worked diligently to create positive and impactful ways to have 4-H members and volunteers stay connected with each other.

Providing these virtual opportunities are keeping our 4-H community connected and poised to spring into action when can safely gather together to conduct our trademarked “hands on” programming.

http://extension.oregonstate.edu/linn
Linn County 4-H Hires New Student Workers

Linn County 4-H has hired two student workers to work on developing virtual programming for volunteers to use during meetings. They introduce themselves below:

Cassi Hyde
I am Cassi Hyde and am a junior at Oregon State University. I am studying Agriculture Science with a minor in Animal Science with the intent of getting a Master’s Degree in Agriculture Education. I am also an active member of the Scio FFA Alumni and Friends. I am a volunteer at the Four Rivers 4-H Camp.

In 4-H and FFA, I had the opportunity to show hogs for nine years, along with the occasional goat and beef heifer. The Scio FFA Chapter is where I found my passion for agriculture and education, but is also where I truly found myself. This is why my career goal is to become a high school agriculture teacher and FFA advisor, so I can give students the opportunity to grow into the best person they can be.

I am very excited to start this new chapter in my life at the Linn County Extension Office!

Jensen Comment
My name is Jensen Comment, and I’m a second-year student at Oregon State University majoring in Agricultural Sciences. While growing up in Eastern Oregon, my interest in the agricultural industry was cultivated through involvement in 4-H and FFA throughout middle and high school. After earning my bachelor’s degree in Ag Sci, I plan to continue my studies at OSU and pursue a master’s degree in Agriculture Education. In my free time, I enjoy hiking, baking, spending time with family, and playing with my two Beagles. I am passionate about the outreach of Extension, and am looking forward to assisting with the Linn County 4-H program over the coming weeks.

2021 Beef Weigh In

After all of the uncertainty that the 4-H members and auction committee faced in 2020, there was some speculation about how many youth were going to commit to raising a steer for the 2021 livestock show and auction. 4-H registrations have been slow to come in since all club activity had to take place virtually due to the pandemic. When volunteers gathered on February 10 and 13 to weigh in steers, they didn’t really know what to expect. As the start time arrived, there was a line of trucks and trailers with steers and youth ready to cross the scale and officially start their 4-H project year. The youth were excited to be there, showing off their projects and figuring out how much their animals weighed. The conversation in the barn was of excitement and lots of questions about what was next.

It was such a refreshing time to see the kids so excited for their projects and a brief sense of “normalcy.” It turns out all that speculation about how many kids wouldn’t do a project this year was just that, speculation. As it turned out, we weighed in more steers than last year. Fifty-seven steers went across the scale! With youth home more, it was evident that these animals had been worked with, and are all off to a great start.

It’s Time To Plant!

We Have Peas, Spinach, Asparagus, Strawberries, Lettuce, Broccoli, Blueberries, Kale, Brussels Sprouts, Blackberries, Cabbage, Raspberries & More!
4-Her’s are still working hard

Many of our 4-H members are still working hard and continuing to “Make the Best Better,” even though all of our 4-H activities are taking place virtually. Lots of hard work has been taking place around Linn County.

Hollis Kizer learning how to ear notch a pig with help from Karie Kelley. Annie Kizer snuggling with one of her new born lambs. Lydia and Selah Wright are feeling accomplished after getting their lambing pens all set up and their ewes moved in. Lydia and Selah’s ewes happy in their new pens.

Linn County Record Book Winners

Congratulations to the Linn County 4-H Members that participated in the 2020 Record Book Contest. Even though 2020 didn’t look anything like a typical 4-H year, these youth worked hard, persevered, and completed their record books. Books are judged on the completeness of each record, the youth’s involvement in both 4-H and in the community and school. Each book also includes a story about how the 4-H year went and what the members learned. In 2020 there were some hard lessons learned when everything changed, but each of these members found some bright spots to share.

County Medals Awards recognize 4-H members in project or activity areas who have demonstrated advanced accomplishments in a 4-H project, as well as in leadership and citizenship activities.

County Medal Award Winners
Andrew Bradford Intermediate Citizenship
Conner Tye Senior Leadership

Judges Choice Award Winners
Erika Emig, Junior
Emily Kincare, Junior
Gabriel Bradford, Intermediate
Ryan Henry, Intermediate
Elizabeth Kincare, Intermediate
Haley Tye, Intermediate

Judges Choice awards are awarded to the members that do an outstanding job on their record book and receive a score of 95 or more. A perfect score is 100.

Ag Boosters Seeking Members

In 2018 the Linn County Youth Livestock Auction (LCYLA) committee created a new program called the LCYLA Ag Boosters. The purpose of the booster program is to support 4-H and FFA youth at the Linn County Fair and enable businesses and individuals who otherwise might not purchase an animal outright, an opportunity to be a part of the auction. By pooling funds together, the Ag Boosters are able to support every youth in the auction.

We would like to personally invite you to become a member of the 2021 LCYLA Ag Boosters! We offer three levels of partnership: Gold for $1,000, Silver for $500, and Bronze for $250. In addition to supporting the youth in our area, please remember that your donation also provides a multitude of benefits including: signage at the auction, recognition in the sale catalog, your name on the “buyer’s fence” (on display year-round at the fairgrounds), name posted on the LCYLA website, and any other advertising opportunities that come up.

LCYLA is an all-volunteer, non-profit organization, and your donation is tax deductible.

Year after year, there has been tremendous growth in the number of 4-H and FFA members participating in market projects. Auction success is dependent upon bringing the community and youth together. Not only is the sale of a livestock project a reward for the hard work and dedication put into raising an animal, but these monies are used to offset the costs of future projects and are saved for further education. The skills obtained while raising livestock will also carry over into other aspects of life; developing leadership, responsibility, sportsmanship, teamwork, community service and a positive attitude in our youth. It is imperative that we continue to support the program.

In 2020, we were able to boost each lot by 6 percent of the sale price for a total donation of $29,106.73. While we don’t know what July 2021 is going to bring, we are still going to do our best to raise extra money through the Ag Booster program. Youth are raising livestock as you read this letter in preparation for this summer, and the Ag Boosters will be here to support them no matter how the auction takes place.

We hope you will consider becoming a member of the 2021 LCYLA Ag Boosters. If you have any questions, please feel free to visit www.lcyla.com.
Volunteers sell bee supplies, such as mason bee cocoons and bee houses, at the Pollinator Conference each year, and will be doing so again this year, although the sales will be conducted through an online format.

Records, who has worked with Master Gardener volunteers for the past three years in helping promote the conference, said she believes the educational work the volunteers are doing is highly beneficial to pollinator health and garden food production.

“These volunteers that are promoting pollinator conservation are really boosting home food production, which is especially important in these uncertain times,” Records said.

In support of Records’ assessment, Webb pointed out that conference evaluations, which started three years ago, show that about 60 percent of participants in the conference are new each year and about 80 percent are either first- or second-year attendees. “So that means that we are reaching more people every year,” Webb said.

“We get a lot of feedback,” she said, “and the evaluations tell us that people like the speakers we bring in and that they are gaining knowledge.

“We’ve also noticed that many of the local nurseries now are doing bee classes,” Webb said. “And we have had contacts from people out of state asking to find out more about how we do the conference in hopes of putting on conferences similar to ours.

“I think we have had a major impact on pollinator health,” Webb said. “We are teaching a lot of people about pollinators and bees through BEEevent, Bee Notes and the cocoon harvesting classes.”

Methods. Later this spring when you see the numerous yellow flowers on the mustard plants it will be too late for spraying. You would be wishing you had a calendar to alert you earlier in the year before the weeds go to seed.

**Weed Control**

Weeds are very diverse, and this applies to the methods used to control them. It is best to use integrated pest management (IPM) techniques for control and eradication of weeds. This includes weed ID, mechanical control (pulling, grubbing, digging), cultural control (improve site for competitive, beneficial crop), biological control (insects, fungi, livestock), chemical control (pesticides), monitoring progress (what worked and what did not), and retreatment. Weeds can have annual (one-year), biennial (two-year), or perennial (year after year) life cycles and can spread by seeds or roots or both. You must know the weed biology in order to match it up with the appropriate control methods. Use the weed calendar to note appropriate timing for control measures.

For more information on all these measures, please contact the OSU Extension Service office for connecting to the right person to help you on your site (farm, ranch, woodlot, crop, garden, etc.). You can also find many publications and handbooks for weed biology and control on our website (https://extension.oregonstate.edu/pests-weeds-diseases/weeds).

**Fire Aware. Fire Prepared. continued from Page 15**

greater awareness and actions.

The campaign will begin in March with a three-part online series presented statewide by OSU Fire Program Specialists to help people be Safe at Home. It will address preparedness at three levels: individual, home and landscape.

Later this spring, we will follow up with a series of locally-oriented webinars. In these sessions, we will dive into how fire behaves in western Oregon and start to develop a road map to better fire readiness. We will also meet some of the agencies and community partners that will help you get there!

Community action is a key step toward effective fire readiness. That is why our fall 2021 programming will focus on building community, by addressing neighborhood preparedness, networking and planning.

Check the Fire Aware, Fire Prepared campaign website, and plan to participate. Schedule information will be posted here https://extension.oregonstate.edu/fire-program

Fire awareness and preparedness is everyone’s job!