Food Preservation Experiences a Resurgence

By Mitch Lies, GROWING Editor

Corvallis resident Belinda Barnes started preserving food to gain more control over what she eats. “When you preserve foods, you know exactly what is in them,” Barnes said, “and you don’t have all the preservatives and chemicals that are in a lot of processed foods these days.”

Then it became a social thing, something she could share with her stepmother. Corvallis residents John and Shona Trumbly also like that they have more control over what they eat when consuming food they preserve. “We don’t add any preservatives; we don’t add a lot of sugar; so, we know what we are getting,” Shona said. “And it is fun for us to do it. We enjoy it.”

Barnes and the Trumblys are among thousands of Linn and Benton county residents that are part of a resurgence into an activity that once was commonplace in homes across the U.S., according to Family and Community Health Extension agent Jeanne Brandt.

“We can’t teach enough classes,” Brandt said of her food preservation offerings. “Our classes are full every time we turn out another set of canning classes.”

People of all ages are embracing food preservation, Brandt said, and for a variety of reasons, including a desire to take more control over what they eat.

Also, Brandt said, many people, like the Trumblys, have sizable gardens and need to preserve food when ripe so they can enjoy it.

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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: 541-766-6750. Fax: 541-766-3549.

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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Linn County Extension Association Legacy Scholarships

Linn County Extension offers two $1,000 LCEA Legacy Scholarships. This year we had many outstanding applicants to choose from. All applicants demonstrated academic achievement and strong community involvement. The 2019 winners of these scholarships are:

Kelton Bruslind – Kelton is the son of Scott and Linda Bruslind, and has lived in Linn County his entire life. He participated in 4-H programs for nine years as a member of the Lucky Livestock 4-H club. Kelton has learned about animal husbandry, animal showmanship, livestock marketing, and how to communicate with the public. Kelton quotes that his 4-H club leadership role as President and Treasurer have, “provided me with an opportunity to learn about management and organization.” This fall he plans to attend Oregon State University and major in pre-electrical engineering.

Trevor Tinney – Trevor has participated in 4-H since he was in kindergarten and quotes, “it has taught me work ethic and the importance of helping others.”

He was an active member in the Diamond Back 4-H club, in which his mother Amber is a leader. Trevor has volunteered for multiple organizations for the past ten years, including multiple animal rescue organizations such as Chintimini Wildlife Center, Safe Haven Humane Society, Turtle Ridge Wildlife Center, Lighthouse Farm Sanctuary, and the Oregon Department of Fish and Wildlife.

He understands the importance of giving back to his community. His goal is to inspire others through the journey he has had with 4-H. Trevor graduated from Santiam High School and plans to attend Mt Hood Community College.

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for longer periods of time. An increased interest in buying local also is driving this resurgence in food preservation, Brandt said. And food preservation can be a way to stretch a food budget, particularly if one grows the food they preserve.

Plus, if disaster hits, those with preserved food likely will fare better than those without. “If we ever have a natural emergency where we can’t get to food, we have it,” Shona Trumbly said. “We are pretty comfortable knowing we can live with what we have if we ever need to.”

Brandt attributes at least part of the increased interest in food preservation to a desire to rekindle family traditions that are at risk of being lost in today’s fast-paced society.

“Traditionally, families, friends and neighbors would get together and do large-batch food preservation,” Brandt said.

“Today, families have moved away from each other, and many of our communities don’t have that sort of cooperative spirit anymore.”

Food preservation classes offer opportunities to rebuild that sense of community, she said, and develop a camaraderie among like-minded individuals.

“People get a chance to meet others who are interested in the same thing and compare notes about where to get produce, what the best seeds are for certain garden plants, favorite recipes,” Brandt said. “Someone may have an excess of apples that they want to share. Food preservation is more fun when you are working with others.”

People of all skill levels participate in food preservation classes, Brandt said.

“We have people who have preserved food as they were growing up and maybe have not done so lately – say because they had careers and were raising families and now have time and interest. And we have a great group of young people that this is all new to. They did not see their parents and grandparents preserve food, so it is all new to them and they are enjoying learning these self-sufficiency and life skills.

“And we love that group,” she said, “because they don’t have bad habits to break.”

Even experienced food preservers benefit from classes, Brandt said.

“Absolutely, there are things even experienced people can

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Join the Master Gardener Program! Applications open October 1st

Excited about making things grow? New to gardening in Western Oregon? Interested in helping others to be successful gardeners?

- Visit us online to learn more about the 2020 program and apply: https://extension.oregonstate.edu/mg/linn-benton/how-join
- Sign up for The Valley Gardener free eNewsletter to find gardening resources that work for you and be notified when Master Gardener applications open: https://tinyurl.com/y2z6xdke
- Find us on Facebook and Instagram to see what Master Gardeners do! linn&bentonmastergardeners

September-October Gardening Calendar for Western Oregon

The Oregon State University Extension Service encourages sustainable gardening practices. Preventive pest management is emphasized over reactive pest control. Identify and monitor problems before acting and opt for the least toxic approach that will remedy the problem. The conservation of biological control agents (predators, parasitoids) should be favored over chemical controls.

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 (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.

**SEPTMBER**

Maintenance and Clean Up

- Harvest winter squash when the “ground spot” changes from white to a cream or gold color.
- Pick and store winter squash; mulch carrots, parsnips and beets for winter harvesting.
- Protect tomatoes; pick green tomatoes and ripen indoors if frost threatens.
- Reduce water on trees, shrubs and vines east of Cascades to harden them for winter.
- Stake tall flowers to keep them from blowing over in fall winds.
- Dig, clean and store tuberous begonias if frost threatens.
- Harvest potatoes when the tops die down. Store them in a dark location.
- Optimal time for establishing a new lawn is August through mid-September.
- Aerate lawns.

5470 NE Hwy 20, Corvallis 97330 • (541) 753-6601 • GarlandNursery.com
Master Gardener trainee Emily Herb brings the skills of an educator and sign language interpreter to re-envisioning the popular Seed to Supper classes. Offered in collaboration between Master Gardeners, Oregon Food Bank and other community partners, Seed to Supper aims to connect low-income households with the know-how and resources to grow tasty and healthy food. Emily Herb shared this story in August of 2019.

A parsonage garden
I grew up in Southern Oregon where my mother’s family is from. We lived in Grants Pass, which was a small timber town at that time. Grants Pass in the 1980’s was struggling with the fall of the timber industry and the houses, yards, and lives of residents reflected that struggle. I do not remember many ornamental flowers or trees. My father was a minister there and we lived in a small parsonage with a small yard. My mom was a gardener and did her best with that little yard. She was always fond of roses and iris, which grew well enough in Southern Oregon. When I was sixteen we moved to Corvallis, and I remember my mom’s excitement about moving to the Willamette Valley where almost anything could grow. When I first moved here I rode my bike up and down the streets looking at the magnolia and flowering cherry trees. I had never seen such full beautiful trees before. Corvallis amazed me with so many yards spilling over with beautiful plants.

Rescuing bargain flowers
All my early gardening memories involve my mother. She loved plants just like she loved animals and children, and she couldn’t stand to see them suffer. I have a childhood memory of when she and I were at the grocery store on our bikes and she came across a flat of half dead chrysanthemums the store was selling cheap. We had to figure out a way to bike all of them and our groceries home so she could save the mums from death. My mom loved scouting out a deal and the hunt for the plants was a big part of the pleasure. We drove far and wide to go to nurseries and gardens all around the Willamette Valley. This was sometimes a trying experience, but her passion and care instilled in me a love of plants as well as the knowledge of how to care for them.

A new family garden
My favorite gardening memories center on family gardening in the house I live in now. Eleven years ago my parents, my husband, my two children, and I moved into a house across from Corvallis High School. The house came with a coveted Corvallis double lot and we were able to buy another adjoining lot to make a very nice 3/4 acre in the middle of town. Our front yard is terraced and we planted the first terrace with roses for my mother the fall after we moved in. It is filled with roses bought on sale at the annual Heirloom Rose garden summer sale.

In the years we have been here, my mom and dad lined the north facing fences with rhododendrons. We went to all the local garden sales and created beds of shade and sun perennials. My husband, my gardening partner and personal backyard engineer, put in berries that came from his father’s berry fields and taught himself to prune the large gravenstein apple tree and pear tree that came with the property. I am lucky enough to have two huge vegetable gardens, raised beds, and a chicken mansion. My children learned to garden and weed with the family in this massive backyard. It has been our family group project and when I go outside I see all of us reflected in the gardens we have created. My mother died a year ago and my father is less inclined to work outside than he once was, but through the help of the children and my best friend who lives in the neighborhood, my husband and I are able to keep up and even continue creating our backyard project, which of course is never done.

Seed to Supper: hands-on
I decided to become a Master Gardener because I have a passion for growing food and I want to assist and teach people with limited access to fresh, organic produce the skills to grow their own. When I saw the Master Gardening Seed to Supper program advertised in the newspaper one year I decided that this might be the way to become involved in work I believe in. Since completing my Master Gardening training and starting on my volunteer hours I have had the opportunity to be part of a team teaching Seed to Supper and then part of a team who has redesigned the Seed to Supper course into a completely hands-on class we piloted this Spring.

The new class that we taught this spring came from an interest among several people on the Community Garden Action Team (CGAT) to teach a basic gardening class that contained all the content of the original Seed to Supper class, but using a completely hands on approach out in an actual garden. The idea was to talk less and do more, or perhaps talk while doing. We all thought that gardening is something one learns best through practice. I volunteered to go through the Seed to Supper book and to organize the content of the text book into hands on “stations” that participants could rotate through to learn all the skills and concepts normally taught through power point slides in a classroom.

Gardening 101 & 102
Through this curriculum redesign we ended up with eight stations that teaches the same concepts of Seed to Supper, including some helpful redundancy. This past spring we taught the class over the course of two Saturday mornings out at Willamette Community Garden. We called the classes Gardening 101 & 102 and each class lasted three hours and included four stations full of content. The reviews back from our 20 students are very positive and we plan to teach more of this class in the future. It has been an amazing experience for me to get to be an important part of curriculum writing, program planning, and then teaching. This process has been everything that I hoped Master Gardening would be.
By Kym Pokorny, OSU

Lawns languish in the heat of summer unless showered with the water they require to thrive. But not to worry, the grass isn’t dead.

Come fall when the rains start again, grass greens up quickly, said Alec Kowalewski, turf specialist for Oregon State University’s Extension Service.

While letting your lawn go dormant in summer isn’t a bad thing – especially with concern about water shortages – lack of irrigation does allow pesky weeds to gain a foothold, he said. And regular wear and tear can cause compaction within a lawn, which leads to brown or bare spots.

Now is a good time to whip your lawn back into shape, but starting over usually isn’t necessary.

“You should always try renovation before putting in a new lawn because it’s difficult to get a stand of grass established,” Kowalewski said. “So if you have something to begin with, go with renovating.”

What you have to begin with can vary from addressing a few brown spots to a desert of weeds to hardpan soil. Assess your lawn’s level of neediness and then proceed with a regular renovation or a no-holds-barred one. Most often, a regular tuneup is all that’s needed.

Once you’ve got your lawn established, follow Kowalewski’s three steps to a healthy lawn that will outcompete those pesky weeds: water, fertilize and mow properly.

Watering is a matter of 1 inch a week, but don’t do it all at once.

“If you look at the roots, the majority are in the top 1 inch of the soil,” he said. “The deeper you go the fewer roots there are so watering more than a quarter inch at a time is a waste. So irrigate more frequently with less amounts when it’s not raining.”

Fertilize four times a year. An easy way to remember is to apply on Memorial Day, Fourth of July, Labor Day and Thanksgiving.

When it comes to mowing, never remove more than 1/3 of the grass established,” Kowalewski said. “The deeper you go the fewer roots there are so watering more than a quarter inch at a time is a waste. So irrigate more frequently with less amounts when it’s not raining.”

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Register for FREE Mason Bee Cocoon Harvesting Classes

Registration opens in September at: www.LinnMasterGardeners.com

Learn mason bee cocoon care to protect your bees from predation and get all the pollination benefits of a healthy mason bee population. About 30 percent of blue orchard mason bees survive in nature, but we can get about a 90 percent survival rate by harvesting and properly cleaning the cocoons. Learn the latest recommendations for harvesting, cleaning and storing cocoons. You will likely see examples of pests, mold and a fungus that affects the cocoons.

If you do not service your cocoons, your site will likely be dead within 1-3 years.

Registration is required for these free mason bee cocoon harvesting classes with space limited to 15 people per session. Classes will be offered in Sweet Home, Brownsville, Lebanon, Tangent (Linn Extension office), Albany, and Corvallis. Classes will be held in mid October-early November – see event calendar in the publication for location details and times.

Bring your filled tubes, teal, and laminated blocks. Those who come to just learn (and do not have filled tubes/blocks) can help you harvest your cocoons. Bee houses, tubes/liners, blocks and pollinator related books will be for sale at these classes.

Please call the Linn County Extension office at 541-967-3871 if you later find that you cannot come, so we can open your spot to others. The classes are limited to 15 people per class.

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You deserve the relaxation of a visit to your county Master Gardener Demonstration Garden, where you can get inspiration for growing the best veggies, attracting pollinators, gardening in small spaces, and more. Find demonstration gardens at your County Fairgrounds. Drop by Wednesday mornings to visit with Master Gardener volunteers in person.

Garden Calendar continued from Page 3

- Early-September: Apply 1 pound nitrogen per 1,000 square feet to lawns. Reduce risks of run-off into local waterways by not fertilizing just prior to rain, and not over-irrigating so that water runs off of lawn and onto sidewalk or street.
- Stop irrigating your lawn after Labor Day to suppress European cranefly populations.
- Recycle disease-free plant material and kitchen vegetable and fruit scraps into compost. Don’t compost diseased plants unless you are using the “hot compost” method (120-150°F).

Planting/Propagation
- Divide peonies and iris.
- Plant or transplant woody ornamentals and mature herbaceous perennials. Fall planting of trees, shrubs and perennials can encourage healthy root growth over the winter.
- Plant daffodils, tulips and crocus for spring bloom. Work calcium and phosphorus into the soil below the bulbs at planting time. Remember when purchasing bulbs, the size of the bulb is directly correlated to the size of the flower yet to come in spring.
- Plant winter cover of annual rye or winter peas in vegetable garden.

Pest Monitoring and Management
- Apply parasitic nematodes to moist soil beneath rhododendrons and azaleas that show root weevil damage (notched leaves).
- Control slugs as necessary. Least toxic management options 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 trailing berries for leaf and cane spot. Treat if necessary.
- As necessary, apply copper spray for peach and cherry trees.
- Spray for juniper twig blight, as necessary, after pruning away dead and infected twigs.
- Continue monitoring late-season soft fruits and berries for Spotted Wing Drosophila (SWD). If SWD are present, use an integrated and least toxic approach to manage the pests. Learn how to monitor for SWD flies and larval infestations in fruit.
- Spray susceptible varieties of potatoes and tomatoes for early and late blight.

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**Food Hero wishes you a Happy and HEALTHY 2019-20 school year!**

Please visit www.foodhero.org for healthy lunch and snack ideas.

The Oregon State University Extension SNAP-Ed Program’s Healthy School Celebrations is designed to bring healthy foods and fun activities together at school to make healthy habits the norm. The Healthy School Celebrations strategies assist schools to provide consistent messaging around the school food environment and align with Oregon School Wellness policy best practices. For school interested in supporting Healthy Celebrations visit https://foodhero.org/celebrations

**Freeze Fruits Now to Make Jams, Jellies, Pies Later**

Frozen fruits are ideal for making jams, jellies, and pie fillings later. Freezing is one of the simplest and least time-consuming methods of food preservation. Under optimal conditions, freezing is the best form of food preservation in terms of retaining nutrients, flavor, and texture. Freezing does not kill most microorganisms (except trichinae and fish parasites); it just puts them to sleep. Therefore, it is important to handle foods safely prior to freezing and when defrosting. Always wash your hands, surfaces, cutting boards, and knives before preparing foods for freezing.

For best quality frozen foods:
- Freeze fruits and vegetables when they are at peak ripeness.
- Freeze fruits and vegetables in made-for freezer packaging, fully moisture and air proof.
- Premasure the contents of packages so they are just right for a batch of jam, one pie, or other planned use.
- Remove as much air as possible from packaging.
- Freeze fruits and vegetables as quickly as possible (0°F or colder).
- Use oldest frozen foods first.

For detailed steps for successful freezing of fruits and vegetables see: https://catalog.extension.oregonstate.edu/pnw214

**SNAP Ed Program has a Busy Summer**

SNAP-Ed Nutrition Educator Paul Smith and intern Juan Medina serve a Food Hero recipe - Tropical Smoothie - at Lancaster Bridge. Kids prepare a recipe from the featured country at Salsa con Salsa held at Lincoln Elementary School in Corvallis.

The Linn/Benton SNAP-Ed team has been busy delivering healthy eating messages all over the counties this summer. SNAP-Ed partnered with the Corvallis School District Food Service to offer a week-long event at Lancaster Bridge Apartments. Food Service offered a different local food item each day. SNAP-Ed helped feature that ingredient by bringing a recipe with that item, Food Hero monthly newsletters, hand stamps, coloring sheets, joke of the day, and more. Local food featured was carrots, strawberries, blueberries, cantaloupe, and milk.

SNAP-Ed partnered with the Albany Farmers Market this summer to have a booth next to the Women, Infants, and Children (WIC) department and the Power of Produce (PoP). They even had a special visit from the Oregon Blueberry Commission, and was then featured on their facebook page! SNAP-Ed featured Food Hero recipes at each visit to the market.

SNAP-Ed teamed up with Lincoln Elementary School in Corvallis to put on a new program called Salsa con Salsa. It’s a three-week program, all in Spanish, touring 6 different countries (Mexico, Colombia, España, Perú, El Salvador, and Panamá). Each day kids learn more about that country by playing board games/reading books, making food, and learning a dance.

**OSU Extension Service Food Safety and Preservation Hotline**

Staffed Monday-Friday from 9a.m.-4 p.m.
Available through October 12.
Call 1-800-354-7319 (toll-free)

Trained volunteer Master Food Preservers are waiting to help you with all of your food handling and preservation questions. Don’t hesitate to call on them!
No Canning in Electric Pressure Cookers

USDA does NOT endorse using their canning processes or processing times in electric pressure-cooker appliances.

Pressure canning low-acid foods is a tightly controlled process. When sealed in a container, all low-acid foods provide the ideal conditions for the growth of Botulism, a deadly bacteria which is odor-free, taste-less, and otherwise invisible. Proper processing in a stove top pressure canner is necessary to ensure that the contents are safe. Processing times are carefully calculated based on the type of food being canned, the elevation, and the equipment being used.

There are concerns about venting, reaching and maintaining the appropriate internal temperature, and altitude adjustments in these electric appliances. Most importantly, the USDA low-acid pressure process times rely on the entire canning process for the safety of the food. Bacteria are not only killed during the process time, but also the time it takes the canner to come up to pressure and the cool-down time. Even after the heat is turned off under the canner, at the end of the recommended process time, the food remains at high enough temperatures for a period of time that can still contribute to killing of bacteria. This retained heat while the canner cools naturally to 0 pounds pressure after processing, contributes to the safety of the food. If anything is done to shorten the cooling period, including using a small cooker, then the food could cool down more quickly, and be under-processed. (That is why we recommend using only stove-top pressure cookers that hold four or more quart-size jars.)

For these reasons, the USDA does NOT endorse using their canning processes or processing times in electric pressure-cooker appliances. These appliances are acceptable for cooking, but not for canning. It is especially dangerous to use these appliances to attempt to can meat or vegetables.

Please note: This statement about electric pressure cookers does NOT include the Ball® FreshTECH Automatic Home Canning System for acid foods only, which is electric and comes with its own instructions and pre-set canning options.

Source: Canning in Electric Pressure Cookers, Lizann Powers-Hammond, WSU, October 2015

Check Your Pickle Recipes

Pickle recipes, ingredients, and processing recommendations have changed over the years. To ensure that your pickles are safe and successful, check your recipe with these pointers in mind:

• Use up-to-date recipes from reliable sources. (See suggested resources at the end of this article)
• Fresh or quick-pack pickle recipes should have at least as much vinegar as water in the brine. Make sure to use vinegar that is 5 percent acidity. In the past, when people fermented their own vinegar at home, vinegar was several times stronger than this. That is why older recipes may call for less vinegar than a current recipe requires.
• If pickling lime is called for in a recipe, it must have a rinsing step. If fresh vegetables are used, lime should not be needed to crisp them.
• Fermented pickles or sauerkraut must include salt. Salt is an important part of the fermentation process. Attempting to reduce the salt when fermenting is likely to result in having the product spoil instead of ferment properly.
• Processing instructions must be correct. Quick pickles must be processed as soon as they are made. Fermented pickles must not be processed until they are fully fermented and have a sour taste. Pickles can be stored in the refrigerator for weeks until consumed instead of processing them in a canner for storage in the pantry.
• Make your pickles unique with your own combination of herbs and spices. Adding and subtracting fresh herbs and dried spices in pickle recipes with adequate amounts of vinegar will not impact the safety of the product.

These two resources have step-by-step instructions and many pickle recipes that have been tested for safety and quality.

https://catalog.extension.oregonstate.edu/pnw355/html
https://nchfp.uga.edu/how/can6b_pickle.html

Printed copies are available from your local Extension office.

Garden Calendar continued from Page 5

Indoor Gardening
• Clean houseplants, check for insects, and repot and fertilize if necessary; then bring them indoors.

OCTOBER

Planning
• If needed, improve soil drainage needs of lawns before rain begins.

Maintenance and clean up
• Recycle disease-free plant material and kitchen vegetable and fruit scraps into compost. Don’t compost diseased plants unless you are using the “hot compost” method (120-150°F).
• Drain or blow out your irrigation system, insulate valve mechanisms, in preparation of winter.
• Use newspaper or cardboard covered by mulch to discourage winter and spring annual weeds or remove a lawn area for conversion to garden beds. For conversion, work in the paper and mulch as organic matter once the lawn grass has died.
• Clean and paint greenhouses and cold frames for plant storage and winter growth.
• Harvest sunflower heads; use seed for birdseed or roast for personal use.
• Dig and store potatoes; keep in darkness, moderate humidity, temperature about 40°F. Discard unused potatoes if they sprout. Don’t use as seed potatoes for next year.
• Harvest and immediately dry filberts and walnuts; dry at 95-100°F.
• Ripen green tomatoes indoors. Check often and discard rotting fruit.
• Harvest and store apples; keep at about 40°F, moderate humidity.
• Place mulch over roots of roses, azaleas, rhododendrons and berries for winter protection.
• Trim or stake bushy herbaceous perennials to prevent wind damage.
• To suppress future pest problems, clean up annual flower beds by removing diseased plant materials, overwintering areas for insect pests; mulch with manure or garden compost to feed the soil and suppress weeds.
• Cover asparagus and rhubarb beds with a mulch of manure or compost.
• Clean, sharpen and oil tools and equipment before storing for winter.
• Store garden supplies and fertilizers in a safe, dry place out of reach of children.
• Prune out dead fruiting canes in raspberries.
• Harvest squash and pumpkins; keep in dry area at 55 to 60°F.
• Spade organic material and lime into garden soil, as indicated by soil test results (if necessary and the weather permits).

Planting/propagation
• Dig and divide rhubarb. (Should be done about every 4 years.)
• Plant garlic for harvesting next summer.
• Propagate chrysanthemums, fuchsias, and geraniums by stem cuttings.
• Save seeds from the vegetable and flower garden. Dry, date, label, and store in a cool and dry location.
• Plant ground covers and shrubs.

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Food Preservation Experiences a Resurgence

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learn,” she said. “There has been a tremendous amount of research in the last few years, because of this resurgence of interest. And there are a tremendous number of new products and recipes that are out.

“One of our goals as we are providing food preservation information is to help guide people to places where the instructions and recipes are safe, so that they do not become ill from their food preservation, and also so that they get good quality products in the end,” Brandt said.

Whether canning or dehydrating foods to better take advantage of your garden, or just as a way to gain more control over the food you eat, preserving foods is an excellent way to ensure long-term access to nutritious meals. “And it is an accomplishment,” Brandt said. “You reduce waste. You are eating locally. There is a lot of motivation for preserving your own food.”

The Linn and Benton County Extension Service Family and Community Health Program is adding two food preservation classes in September, one on September 4, and one on September 11. For more information, or to register for a class, contact your county Extension office or register online at https://beav.es/ZiL. In Linn County, call 541-967-3871. In Benton County, call 541-713-5000.

Food Preservation
2019 Hands-On Classes

Due to popular demand we have added two additional classes on Wednesdays in September

- Sept 4, 6-9 p.m.
  Preserving Tomatoes & “The Laws of Salsa”
  HELD AT:
  LINN COUNTY EXTENSION
  33630 McFARLAND ROAD
  TANDEM, OR 97389
  541-967-3871
  COST IS $18 PER CLASS
  PRE-REGISTRATION IS REQUIRED AT HTTPS://BEAV.ES/ZIL

- Sept 11, 6-9 p.m.
  Pickling: Fermented and quick pickles

OSU EXTENSION SERVICE | LINN & BENTON COUNTY

Mitigating the Cost of Food Preservation

By Mitch Lies,
GROWING Editor

The initial investment into food preservation can be costly, according to Linn and Benton County Family and Community Health Program Jeanne Brandt. But, she said, sometimes poking around the neighborhood can yield surprisingly good results.

“There is a tremendous amount of food preservation equipment in our community,” Brandt said. “So, before people buy things, they should ask around. There is probably someone on your street who has jars and a canner and a dehydrator and they would be happy to have you make a space in their closet or their garage and get that equipment back into use.”

“Most canning equipment doesn’t wear out if it has been cared for, and it can be passed down through the generations,” she said. “So, it is economical and environmentally conscious to continue using the existing supplies that are in our community.”

Brandt noted that people often donate jars and other canning equipment to the Extension Service. The Service uses the equipment for classes and passes it along to community organizations. And, she said, “we are happy to be sort of the clearing house for food preservation equipment.”

As for other ways to mitigate the initial cost, Brandt said it can be less expensive and easier to start with a dehydrator than to jump right into canning.

“I think, ultimately, it is easier to dehydrate than to can,” said Corvallis resident and Master Food Preserver Belinda Barnes. “There are less steps. If you are dehydrating, you have to get out all of your jars and the equipment, and there are more steps and more time to do the processing. With dehydrating, you basically prep whatever product you are going to preserve, put it in the dehydrator and then leave it for however long it calls for.”

Barnes dehydrates foods for many uses, she said, including as snacks, soups and whole meals. “There is one that we have called Caribbean spiced rice and beans that includes pineapple, carrots, onions and spices. All you have to do is take that bag of dehydrated food, put it in five cups of water and boil it for 15 minutes and you’ve got a whole meal.”

Typically, food will lose some of its nutritional value when preserved, Brandt said, but not much. There is a lot of air exposure, for example, when dehydrating produce, so some vitamins can be lost. And water-soluble nutrients can be lost when canning, particularly because most people don’t consume the liquids of canned goods.

“There is not a good rule of thumb about which type of preservation is the least likely to remove nutrition,” Brandt said. “So, our nutrition advice is to eat a variety of foods prepared and preserved in a variety of ways. Then you should account for any nutrient loss.”

Also, when consuming dehydrated foods, Brandt advises people to be aware of how much they are consuming. “The food is more concentrated, so it is easy to eat a lot of calories when eating dried food,” she said.

A final reminder, she said, is people should try and consume dehydrated food within one to two years. After that, quality deteriorates.

Belinda Barnes, with a campfire pizza that she dehydrated, likes that through food preservation, she takes more control of the food she consumes.
As Fall Creeps Up continued from Page 5

than one-third of the grass at one time. That means if the lawn is 3 inches long, cut only 1 inch. Cutting more than one-third weakens the lawn, leaving it vulnerable to weeds and diseases. For most grasses, 2 inches is about top range of what a homeowner will tolerate, but higher is even better.

“Increase the height of the grass as tall as you can stand it and mow once a week,” he said. “If you mow it to an inch, it’s horrible to the health of the plant because you’re decreasing rooting depth and stress tolerance. And you’ll have to water more often.”

Mow once a week in spring and fall, less often during summer and winter months. Instead of bagging up clippings, consider leaving them where they fall. They break down quickly and resupply much-needed nitrogen. The more often you mow, the easier this is to do.

For more detailed information visit catalog. extension.oregonstate.edu and search for Lawns or contact the Master Gardener volunteers.

Learn from the experts with the OSU Turfgrass Program!
Register for Sustainable Lawn School in Corvallis. September 12th, 10 a.m.–noon at https://extension.oregonstate.edu/mg/linn-benton/events/sustainable-lawn-school

PNW Brownbag talks begin in October

Linn County Master Gardeners present another season of PNW Brownbag talks at the Albany Public Library, 2450 14th Ave SE, on Wednesdays in October from noon-1 p.m. These informal talks are always free and open to the public. Bring your sack lunch and settle in to learn about interesting gardening topics.

• October 2 – Gardening with Native Plants, presented by Joyce Eberhart, Benton County MG
• October 9 – Basic Entomology, presented by Rich Little, Linn/Benton MG
• October 16 – Fall Vegetables, presented by Grace from Garland Nursery
• October 23 – Plants for Color and Birds, presented by Darren from Shonnard’s Nursery
• October 30 – Putting Your Garden to Bed, presented by Betty Goergen, Linn County MG

Garden Calendar continued from Page 7

- Dig and store geraniums, tuberous begonias, dahlias, and gladiolas.
- Pot and store tulips and daffodils to force into early bloom, indoors, in December and January.

Pest monitoring and management
- Remove and dispose of windfall apples that might be harboring apple maggot or codling moth larvae.
- Rake and destroy diseased leaves (apple, cherry, rose, etc.), or hot compost diseased leaves.
- Spray apple and stone fruit trees at leaf fall to prevent various fungal and bacterial diseases. For more information, see Managing Diseases and Insects in Home Orchards (PDF - EC 631).
- If moles and gophers are a problem, consider traps.
- Control fall-germinating lawn weeds while they are small. Hand weeding and weeding tools are particularly effective at this stage.
- Monitor landscape plants for problems. Don’t treat unless a problem is identified.

Houseplants and Indoor Gardening
- Early October: Reduce water, place in cool area (50-55F) and increase time in shade or darkness (12-14 hours) to force Christmas cactus to bloom in late December.
- Place hanging pots of fuchsias where they won’t freeze. Don’t cut back until spring.
- Check/treat houseplants for disease and insects before bringing indoors.
General management
- Test soil pH and lime as needed. Watch for pH and nutrient stratification in fields that have not been tilled.
- Monitor soil test P and K levels, especially if removing straw.
- On fall planted wheat and grass seed crops, limit N and K placed with the seed to 25 lbs/ac each or less.
- Aim for timely burndown of weeds prior to planting. Efficacy of herbicides increases when plants are actively growing after some moisture (0.5-1” rain).
- Begin scouting fields for slugs, European crane fly, armyworms, cutworms, and winter grain mites once 2-3” of rain have fallen (or in irrigated fields). Armvorm chewing may appear before fall rains.
- Plan to deploy slug bait when soil is moist (>2” of rain) but before steady rains begin.

Grass
- September 15 is the last day for broadcast application of zinc phospide bait for vole control. Baiting down holes may continue throughout year.
- Best window for carbon seeding grass fields is late Sep – early Oct
- Apply pronamide in a tank-mix with a reduced rate of diuron immediately after the carbon band seeding operation.
- On carbon seeded plantings, use ethofumesate pre-emergence for annual bluegrass and volunteer wheat control. Do not wait for rain to dissipate the band for effective control of these two species.
- On new PRG plantings consider using a low rate of oxyfluorfen (1-3 oz/ac) with glufosinate (10 oz/ac) herbicide at the 2-3 leaf – 1 tiller stage. This can follow the pre-emergence ethofumesate treatment to improve annual and roughstalk bluegrass and volunteer wheat control.
- In established grass seed fields without irrigation, complete pre-emergence herbicide applications by early Oct for maximum effectiveness and crop safety, coinciding with the onset of fall rains. Optimum control of sprout and grass weeds occurs when 0.5 inches of moisture is received within 10 days of the herbicide application.
- Scout for adult billbugs and leaf feeding in orchardgrass and control (Oct 15-30). Pyrethroid products are suggested for control.

Wheat
- Consider the traits you are interested in for 2019 wheat varieties. Attend the fall Extension meetings for 2018 results and learn more about your variety options (see inset for dates).
- Soil pH below 5.4 can limit wheat growth. Check for pH stratification if planning to no-till plant.
- Winter wheat planting should be delayed until mid-Oct to

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2019 Fall OSU Extension Seed Crop and Cereal Production Meetings

Wednesday, September 18th
- 8:30 a.m. - Noon: Roth’s Hospitality Center, 1130 Wallace Rd, West Salem
- 1:30-5 p.m.: Linn County Fair and Expo Center, 3700 Knox Butte Rd, Albany

Agenda:
- Digital Advancements in Seed Production: A European Perspective – Special Guest René Gislum, Associate Professor at Aarhus University, Denmark
- Does Straw Management Effect Soil Health? – Betsy Verhoeven, OSU Extension Agent
- Seasonal Monitoring and Management of Key Pests – Will Jessie, OSU Extension Agent
- Fall Weed Management in Grass Seed and Cereal Production – Andy Hulting, OSU Extension Weeds Specialist
- Introduction of New OSU Research and Teaching Weed Scientist – Caio Brunharo, OSU Weed Scientist
- Winter Wheat Variety and Management Recommendations – Nicole Anderson, OSU Extension Agent
- ODA Pesticide Recertification Credits will be available

Fall Management Recommendations

By Will Jessie, Field Crops Extension Agent Linn, Benton and Lane counties

Before we are inundated with fall rains, take this opportunity and tend to some of the most critical management tasks at summer’s end. As you’ve finished straw bailing and/or chopping operations, be sure to test soil pH and make lime applications as needed, particularly if you are establishing a perennial crop. Also pay close attention to stratification of soil pH and nutrients in fields that have not been tilled for 4 or more years. Acidity in the first 4-6 inches of soil can be difficult to spot and can severely limit root growth. If removing straw, make sure you are testing for soil P and K, which are lost at higher rates in baled fields. When making N and K applications with fall planted wheat and grass seed, limit each to no more than 25 lbs/ac each.

In addition, please be aware of potential issues with the Sikora pH buffer test. Currently, OSU lime recommendations should only be applied to results from the SMP buffer test. Research is underway to identify the cause of newer Sikora methods resulting in higher buffer pH and lower lime recommendations. If the SMP buffer test is not available and your soil pH test is lower than your crop’s recommendations, consider adding lime to prevent further acidification even if the Sikora buffer pH tests do not recommend lime. For more information see the Western Oregon Lime Guide and crop-specific recommendations at the OSU Extension Catalog (https://catalog.extension.oregonstate.edu).

For pest management, top of the list is almost always fall weed management. Although you may be tempted to get an early start, herbicide efficacy increases significantly when plants are actively growing after the first good rain (0.5-1”). Hopefully weather conditions cooperate this year and provide more reliable windows for weed management before

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Working Your “Best Fields First”

Now is a good time to consider upcoming fall field work. You may have a good idea of how you want your pastures and hay ground to look and work; but you might not have a solid plan on how to go about getting there. Additionally, you might be apprehensive about investing in pasture or hay ground improvement. Please consider the information below on one way to approach field work.

The following advice was put together out of concern on how to address a statement made all too often. That is, “I can’t afford to fertilize all my fields; it costs too much!” And the action of not fertilizing or spreading a little bit here and there and not getting the proper amounts applied. Therefore, the current focus of the Livestock & Forages Program, called Best Fields First, is a method of helping producers apply time and other resources to the improvement of forage production in an agronomic-economic way, and to fields that have the best potential to respond to inputs.

The first thing that should be done is to identify the differences in soil types of your fields. You can do this by going on the NRCS Web Soil Survey site at http://websoilsurvey.sc.egov.usda.gov/, identifying the area you are interested in (Area of Interest of AOI), and outlining your fields. The program will give you an aerial photograph with soil types outlined and numbered. You can select a report that lists the number of acres of the total field along with the acres of each soil type.

Some people find this website easy to use, others do not. Sometimes the computer is at fault. Either way, if you would like to access information for your own fields (and I hope you do) and need help, please contact me and we can work together on it.

On the Web Soil Survey you can also access a description and properties of the soils (composition, depth, drainage class, slope, etc.) and use them in choosing what to plant, how best to divide the land into management units, or how to use the land for other purposes. Use these to make sure conditions for forage growth (plant-site compatibility, soil fertility, grazing management, etc.) are optimized for agronomic, economic forage production.

Don’t stress on all the work you are faced with. Rather, work smart by starting with a small section of the land that has the most potential to respond to your inputs. The website’s soil data explorer tab leads to information on the potential productivity of each soil type for pasture carrying capacity in animal unit months (AUM), tons of hay per acre, or other crops under irrigation or dry-land (rain-fed) systems. Use it to help you identify your “best fields” and work with that one first; then work on other fields as need, finances, and time allow.

The reward for all this hard work, done in a smart way, is that forage can be produced economically by comparing current and potential yields, knowing what inputs are needed to close any gaps, and applying science-based management. For example, a survey of producers in western Oregon found that soil testing and fertilizing according to the OSU Pasture Fertilizer Guide saved an average of $30.25 per acre per year in resources (lower fertilizer inputs) or improved forage production (quality and/or yield). Other management practices proven to work in Oregon can be obtained through OSU Extension Service. We are here for you!
On-farm Compost – Will it Work on My Farm?

By Teagan Moran, OSU Small Farms Program

Composting and agriculture are a long standing and complimentary pairing. The ancient Akkadian Empire in the Mesopotamian Valley referred to the use of manure in agriculture on clay tablets dating back 2000+ years (Smith, Friend 2019). Many agricultural operations, just by the nature of what they do, have what it takes to practice composting: surplus plant materials and/or animal waste, access to the land and the space necessary to compost, equipment already on site, and crops and soils that can benefit from compost amendment.

Why compost and why would you want to make your own?

Farmers use compost for a variety of reasons, to name a few: it helps to improve soil structure, increases microbial activity, enhances plant disease suppression, increases soil fertility, and improves the water and nutrient holding capacity of most soils. These effects can improve the function of fine textured clay and silt soils, as well as coarse textured sandy soils. Many farmers purchase compost for use on their farm, but on-farm composting can make sense for a variety of reasons. If you have a lot of on-farm waste that would make good feedstock (feedstocks are the organic ingredients of composting processes, such as yard debris, animal manures and food scraps), but are difficult or problematic to apply to the land raw, composting can convert them into a valuable soil amendment. Examples may include manure, livestock mortalities, spoiled hay or straw, green-chop from cover crops, mint slugs, packing shed waste, etc. If you have access to organic waste nearby, you might be able to charge a “tipping fee” to accept those materials for composting. Composting can reduce the volume of organic waste (i.e. manure) stored on your farm and reduce environmental risk. On-farm composting gives you control over the feedstock and composting process, and more control over compost quality and price. For ethical reasons you might want to make best use of on-farm and local organic materials and nutrients to move towards a closed loop system on your farm. Some farmers use all their own compost on site, while others sell some as an additional farm enterprise.

Decomposition of raw materials happens on its own without human intervention – it is a biological process driven by micro-organisms (bacteria, fungi, and actinomycetes) and macro-organisms (mites, slugs, spiders, earthworms, etc.) converting organic materials into that dark, earthy smelling, decomposed organic matter we call compost. When we refer to composting we are talking about how humans intervene to manage the conditions and materials so that decomposition happens faster and in optimal conditions and where we want it to happen. Composting systems enable us to easily collect and apply the final compost product, thus turning organic matter into a form we can then add back into the soil.

The main differences between home composting and on-farm compost systems are: scale, intended use, and often, the integration and management of animal manure. Not all animal manure needs to be composted to be used. Compost releases nutrients slowly. In many ways this is a benefit, but sometimes crops want the quick release that fresh manure can offer. Knowing when to use composted or fresh manure is an important decision for farmers (Marriott, Zaborski 2015). In addition, some farms compost animal mortalities, offal, and byproducts on farm.

Like any other operation, composting requires equipment, labor, and management. So what are the main questions a farmer needs to answer before starting on-farm compost? See below for questions and associated details.

Do I have an appropriate site on farm?

The beauty of composting is that it can be scaled to fit the landscape and farming operation. Placement of your compost site can be influenced by aesthetic as well as functional needs. That being said, there are several key factors to consider when selecting your site:

Do you have an easily accessible and dry area with good air circulation to site the composting system? You want to be aware of runoff and avoid any site where it could go straight into a waterway, well, or across your property boundary. Leachate is any water that has come into contact with compost. Leachate can easily contaminate surface or groundwater and can pose risks to health and environment (Brewer, et all. 2013) Good drainage is essential to avoid water pooling, mud, and saturated composting materials. You can find detailed information about water quality in the Agricultural Composting and Water Quality publication linked at the end of this article. There may be zoning requirements for large compost systems. To determine if there are any minimum setbacks, contact your local county planning department. There are also specialists with the Oregon DEQ who can assist in site selection on your property.

Can the composting site remain there for 6–8 months? It can take 6 to 8 months to produce cured compost from raw waste. Will the compost system operate seasonally or all year-round? Most raw manure requires covered storage or a site for year round composting.

How will you access the composting site? You will need space to turn the materials (mixing the compost pile is important to get good quality compost) either manually or with a tractor, and to add water if necessary.

Is the ground firm enough to support heavy equipment if that is to be used? Will that ground be too wet to access at certain times? The amount of space you will need depends on how much material you plan to compost and the compost method you choose. A compost pile must be the proper height and width to insulate itself enough to get hot. A pile should be at least 4 feet high and 4 feet wide, and however long you want (Sideman. 2006). Piles less than about one cubic yard don’t have enough mass to heat up and create a thermophilic compost pile. Some people use open piles or windrows in a field, others use bays or bins to contain the compost.

For area requirements and a worksheet to identify the area you need for your compost see the On-Farm Composting Handbook found in References and Resources at end of this article.

Do I have time?

Good composting requires proper management. Composting is a balancing act and you’re the approach you choose will be informed by your farm’s individual needs and goals. For example, slow composting does not produce enough heat to kill many weed seeds, rhizomes, or pathogens. Making hot compost takes significantly more effort, but
it can produce a high-quality product within just a few months. You can customize the composting process to fit your time availability and specific combination of raw materials, there are different approaches to choose from. Making compost is actually quite easy, but to produce quality compost requires an understanding about the science behind the process, how to measure materials, good timing, and going through some trial and error. For a quick reference and comparison of composting methods check out pg. 13 of Agricultural Composting and Water Quality found in References and Resources below.

During the composting process farmers need to regularly check on the pile and respond accordingly (this takes time). If a pile gets too wet or too dry the decomposition process can slow right down, this can manifest with strong undesirable odors. A well-managed compost system will not cause excessive odors. To learn more about the science behind composting check out the recommended reading list below and keep a look out for local OSU Extension sponsored compost workshops.

**Do I have the right equipment?**

You have the option to use existing on-farm equipment to manage the compost pile or to invest in specialized compost production equipment. That decision would be influenced by your scale and intended use, you can customize your composting based on your available resources and needs. The On-Farm Composting Handbook found in References and Resources below can help guide those decisions. On-farm compost can be done manually if at a manageable size for the labor available. For larger compost systems farmers most often use a tractor with a front loader for building and turning the piles, some farmers invest in windrow turners to efficiently turn piles. Manure spreaders can be used for application. A temperature probe will be needed to gauge timing for turns.

**What should I compost?**

The materials you put into your compost pile have a major impact on how well the composting process works and the quality of the final compost. The key to good composting is to have a variety of materials, a balanced carbon to nitrogen ratio, and good moisture content. That being said, the list of materials appropriate for composting is a long one. A comprehensive list on what to compost and the ratios can be found in The On-Farm Composting Handbook in resources list below. WSU’s Compost Mix Calculator is free online spreadsheet that can help you estimate the C:N ratio and moisture content of your new compost pile (https://puyallup.wsu.edu/soils/compost-mix-calculator/).

**Do I need a permit or license?**

Due to the scale of most small farm compost systems, small farms tend to be exempt from Oregon Department of Environmental Control’s (DEQ) permits. Exempt facilities still need to maintain compliance with environmental performance standards. DEQ’s composting rules are structured such that the type of permit issued is based on the level of risk posed by a composting facility and anaerobic digesters to public health or the environment. The type and amount of feedstock composted is used to establish criteria for determining when a composting facility permit is required and when a facility is exempt from permitting requirements. The feedstock types include:

- **Type 1:** Source-separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, vegetative food wastes including department approved industrially produced vegetative food waste
- **Type 2:** Manure and bedding
- **Type 3:** Dead animals. Meat and source-separated mixed food waste. Industrially produced non-vegetative food waste

According to Oregon Administrative Rules (OAR) 340-096–0060, Oregon allows the following conditional exemptions of facilities from obtaining a permit:

- Composting less than 100 tons of Type 1, or Type 2, or both types of these feedstocks during a calendar year
- Composting less than 20 tons

**Dry Farming Field Days**

The OSU Dry Farming Project will be hosting four field days this summer! Come learn about dry farming, see crops (tomatoes, squash, melon, dry beans, potatoes, corn) grown with little or no supplemental irrigation in the field.

- **September 4** - OSU Vegetable Research Farm (Corvallis, OR)
- **September 6** - Gathering Together Farm (Philomath, OR)
- **September 11** - Dry Farming Presentation and Field Day (Polk County, OR)

For more details and to register visit: https://extension.oregonstate.edu/program/all/smallfarms/events

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http://extension.oregonstate.edu/linn
Discover Yourself in 4-H

4-H is America’s largest youth development organization serving more than 6 million youth annually. Benton County 4-H serves more than 3,000 youth annually through community clubs, school programs, and camps. 4-H empowers youth with hands-on learning experiences to help them grow and thrive. By creating a safe and welcoming environment, youth develop the skills needed to make a positive impact on the world around them.

Members are guided by caring adult volunteer mentors to lead hands-on projects in areas such as science, health, agriculture and citizenship. The 4-H year begins October 1! Youth who are 9-19 years of age as of September 1, are eligible to join 4-H. We also offer a 4-H Cloverbud program for children 5-8 years old as of September 1. Cloverbud members explore a variety of topics, while developing social skills in a non-competitive environment.

Join us Thursday, October 3, 6:30 p.m., at the Benton County Fairgrounds Auditorium building for our annual 4-H Information Night to learn about the Benton County 4-H Program, meet our members & volunteers, and explore the majority of projects available.

If you cannot attend, but would like more information, please visit our website or contact our Benton Extension office.

Lee Allen Youth Livestock Auction

The 2019 Lee Allen Memorial Youth Market Auction had a total of 215 animals sold totaling $502,000.

Thanks to all the buyers for their support of 4-H members! Thanks to the Country Critics Sheep 4-H Club and leaders Jackie and John Essner for raising the donation animal this year, which supports the Steve Moos Scholarship. This year, the Steve Moos Scholarship was awarded to Chance Olufson, Anne Nichols, and Maya Greydanus. Thanks also to the Corvallis Lions Club and the Auction Committee for organizing the auction.

If 4-H members need addresses for their buyers to write their thank you notes, contact your club leader who received a list of buyers.

Benton County Youth Development

Elli Korthuis
541-713-5000
elli.korthuis@oregonstate.edu

Carolyn Ashton
541-713-5000
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Maggie Livesay
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4-H Wildlife Stewards Program, Teaching Students Outside the Classroom Door

- **Date:** Saturday, October 5
- **Time:** 9 a.m.–3 p.m.
- **Audience:** 1st–6th Grade educators and non-formal educators
- **Curriculum and Resources:**
  - Project Learning Tree
  - PreK–8 Guide
  - Field Journal Kit
- **Location:** Corvallis, OR & Peavy Arboretum
- **Description:** Schoolyard and nearby natural area habitats inspire curiosity and a sense of stewardship by connecting students to their local, natural environment. Together we will explore the new Forest Discovery Trail Curriculum at Peavy Arboretum. We will share tips and tools for extending learning to the outside classroom, explore real world examples of projects and journaling, and discuss why this extension is purposeful to learning and student growth. Participants that attend the entire workshop day will receive the Project Learning Tree PreK–8 Environmental Education Activity Guide and a Field Journal Kit.

**Enroll your Classroom in the 4-H Wildlife Steward Program**
- **Teachers** – Fall is the time of year to enroll your classroom in the 4-H Wildlife Stewards Program and take advantage of the yearlong program benefits. According to the 17 classroom teachers enrolled in 2018–19, this program helps to make natural science “real” for their students. Because of participating in the annual youth conference their students meet standards in science, speech and presentation, research and expository writing.

**Why enroll your classroom?**
- We offer two professional development workshops (fall/spring) with a focus on natural science content, curriculum and tips for teaching outdoors. You go home with topic knowledge, hands-on lessons and many supporting materials. Up to 6 PDUs offered at each workshop.
- **October is Learn Outdoors Month.** Take your class outdoors, snap a photo that we can share on Facebook, and you are eligible to win some great outdoor classroom materials. In addition, receive a classroom poster to display your commitment to outdoor learning.
- **Teaching Kits** – from “Animal Adaptations” to “Water Quality” check out more than 30 outdoor teaching kits that make learning outdoors easy. Call our office to reserve the free kits for up to 2 weeks.
- **Mini-grants** – $200 per school for materials to support your outdoor learning projects.
- **Nature Field Journal Contest** (March). Students submit a journal page; receive feedback from a judge and receive a participation ribbon. Students in 4th grade and over are eligible for awards.
- **Showcase your student projects to the community at the 4-H Wildlife Steward Youth Summit** (May). A daylong engagement with more than 200 student project presentations and exciting hands-on activities.
- **4-H Four Rivers and 4-H Wildlife Stewards Camp** (students from 4-H WS classrooms are eligible to apply for scholarships for this overnight resident camp near Salem.)
- **Outdoor Lessons** – as time allows, 4-H staff are available to come to your school.

Need help to get started? Schedule a visit with the OSU Extension 4-H staff or attend a professional development workshop. We will help you make a plan.

**Registering for the 4-H Wildlife Steward Program in 2019–20?** Contact us and we will send you the link to submit a simple online form. At the end of the year, we look forward to hearing how many hours your students engaged in learning outdoors!

Questions contact Maggie. Livesay@orregonstate.edu or Jody.Einerson@oregonstate.edu or call the Benton Extension office 541-713-5000.

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 has awesome tales to tell from the 2019 Benton County Fair

Thanks to our outstanding Benton County 4-H families and friends for an OUTSTANDING Fair! We had more than 580 members with more than 2,100 entries participate in this year’s fairs (including horse fair).

4-H members participated in a wide variety of activities at fair, including family and consumer science art and science interview judging; horse, beef, sheep, swine, goat, llama, dog, companion pet, rabbit, cavy, poultry and pigeon shows; archery and rifle contests; a marketing contest; animal costume contests, table setting contest, cloverbud tour and activities, exhibit building demonstrations, parades, a Master Showmanship contest topped off with youth recognition at our annual 4-H Fair Awards Ceremony.

Our success comes from our 290 plus Benton County 4-H volunteers and chaperones! Thank you for sharing your time, talent, and energy to create a positive youth development experience for our 4-H members!

Volunteer Today. Inspire for a Lifetime.

4-H volunteers are the key to a successful 4-H program and create positive life-changing experiences for youth. 4-H offers endless opportunities to volunteer. Most volunteers commit to on-going service as leaders, while others may assist with a single event or activity. Oregon has more than 6,000 adult and teen volunteers who offer their time and talents to our program. Benton County 4-H is home to more than 290 of those volunteers.

We are actively searching for adults who want to share their time and talents with our members! New volunteers receive a comprehensive orientation and training specific to their role, no knowledge or experience is required. Discover how you can become involved and make a difference for the youth in your community.

Our first leader training of the new 4-H year will be held on Thursday, October 24, at 6 p.m., at the OSU Benton County Extension office. If you are interested in registering, please contact our office or visit our website for more information.

Papa’s Pizza 4-H Fundraiser October 9

An easy way to help raise funds for your Benton County 4-H Program is to go and dine in or take out food from Papa’s Pizza in Corvallis on Wednesday, October 9. All you have to do is provide the cashier with the Benton County 4-H Papa’s Pizza fundraiser flyer, and Papa’s will donate 50 percent of the proceeds! Please contact our office or visit our website to receive a flyer. Thanks in advance for your support!
Enrollment for the 2019-2020 4-H Year Opens Soon

The new 4-H year begins October 1, and we are looking for new members and volunteers. 4-H is open to any youth that are ages 5-18 on September 1 of 2019. 4-H is the largest youth organization in America reaching more than 6 million youth each year. Members are led by caring, knowledgeable adult volunteers who help foster each kid’s interest. The enrollment fees for 2019-2020 is $40 per member, and no more than $80 per family.

If you are interested in getting your child involved, or if you would like to volunteer with 4-H, please call the Linn County Extension Office at 541-967-3871.

The 4-H pledge is:

I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living, for my club, my community, my country, and my world.

The original pledge was written by Otis E. Hall of Kansas in 1918. Some California 4-H clubs add either “As a true 4-H member” or “As a loyal 4-H member” at the beginning of the pledge. Minnesota and Maine 4-H clubs add “for my family” to the last line of the pledge. Originally, the pledge ended in “and my country”. In 1973, “and my world” was added.

The 4-H emblem – it’s kind of a big deal

The official 4-H emblem is a green four-leaf clover with a white H on each leaf standing for Head, Heart, Hands, and Health. The stem of the clover always points to the right.

The idea of using the four-leaf clover as an emblem for the 4-H program is credited to Oscar Herman Benson (1875-1951) of Wright County Iowa. He awarded three-leaf and four-leaf clover pennants and pins for students’ agricultural and domestic science exhibits at school fairs.

The 4-H name and emblem have U.S. federal protection, under federal code 18 U.S.C. 707. This federal protection makes it a mark unto and of itself with protection that supersedes the limited authorities of both a trademark and a copyright. The Secretary of Agriculture is given responsibility and stewardship for the 4-H name and emblem, at the direct request of the U.S. Congress. These protections place the 4-H emblem in a unique category of protected emblems, along with the U.S. Presidential Seal, Red Cross, Smokey Bear and the Olympic rings.

Source: https://en.wikipedia.org/wiki/4-H

Linn County Youth Livestock Auction

The 2019 Linn County Youth Livestock Auction was a huge success with the help of perfect weather, awesome supporters, and great youth members selling top notch projects. Gross sales including add-ons totaled $662,190.65 for 287 animals. Special thanks to Angela Turner of Lacomb Livestock for raising the donation animal this year.

The auction committee started a new program last year called Ag Boosters, this program allows small businesses and people that can’t necessarily afford to purchase a whole animal still support the youth in the auction. An Ag Booster buys into the program for $250 dollars, $200 of the money goes directly to support the youth at the auction. The other $50 goes to provide a thank you dinner in October for all the supporters of the Ag Boosters. In 2019, Linn County had 102 Ag Boosters that donated $28,100 to the youth participating in the auction. With these donations, the committee was able to bump up the sell price of all the youth in the auction.

- Chickens, Rabbits, Turkeys got $30 each;
- Sheep - floor at 10.00/lb, plus each youth got $0.50/lb add on;
- Goats - floored at 9.00/lb by Rick Franklin Corporation, Knife River, and Ram Trucking, Ag Boosters gave $0.25/lb add on;
- Beef – floor at $3.05/lb, plus $0.05/lb add on;
- Swine – floored at $5.00/lb from Sayer Farms, Boosters gave $0.50/lb add on;

Inbound Japanese Exchange Students

Linn and Benton County families had the pleasure of hosting exchange students from Japan for four weeks in the summer. These families open their homes to the youth and chaperones and give them the opportunity to see what life is like here in the Willamette Valley and surrounding areas. During the first week of August the families got together for a pizza party and swim at Mary’s River Park in Philomath. This fun event was planned by Jennifer Bradford, who is our exchange program volunteer for Linn and Benton Counties.
Linn County Fair

Perfect weather, lots of laughter and hard work is what was happening during the week of the Linn County Fair. Cool weather welcomed the animals, exhibitors and their families to the barns. Fair is always a fun time to see all the youth come together and show off what they have been working on all year. It is also a time to make new friends, and rekindle friendships that were made at previous fairs. Not only were there cows, chickens, and all animals in between on display, but there was also all of the cooking, sewing, and art projects, too. Our members displayed some phenomenal entomology and forestry exhibits, Lego projects, and lots of great photos!

The weather was truly perfect for county fair goers. This photo of a double rainbow over the livestock building was taken during fair.

Not all exhibitors show their projects during the county fair. This year, horse fair was held June 24-28, at the Linn County Fair and Expo Center, and regional dog fair was held July 6, at the Oregon State Fair & Exposition Center in Salem.
Welcoming a New Group of Master Woodland Managers


We are excited about welcoming a new group of Master Woodland Manager (MWM) volunteers in the mid and north Willamette Valley. The 22 landowners from Benton, Polk, Washington, and Yamhill Counties completed an advanced training that included eight full days of classes and field tours, providing participants with lots of practical information.

For those not familiar with the program, Master Woodland Managers are trained volunteers who have completed this woodland management training presented by OSU Forestry and Natural Resources Extension specialists and agents, and other local forestry experts. The training covers a wide range of forest management topics meant to improve participants’ knowledge and management skills. Class topics include silviculture, wildlife, riparian and fish habitat, forest roads, timber harvest and marketing, and reforestation.

In return for this training, MWM volunteers contribute time in support of their local communities in many ways: MWMs are frequently a critical part of local landowner organizations (such as the Oregon Small Woodlands Association and Oregon Tree Farm System), and are often active on Watershed Councils or Soil and Water Conservation District Boards. They are often hosts and presenters at Extension-sponsored education events, hosting property tours or demonstrations, or serving as instructors at events like Tree School. Some MWM volunteers do site visits, and will visit local properties to help landowners identify opportunities for improving their woodland stands and properties, identify sources of assistance and direct them to other resources. The 2019 class of volunteers bring a wide range of interests, experience and skills to the program.

The MWM program began over 35 years ago, right here in the mid-Valley. It is now a statewide program, which has trained hundreds of volunteers across the state. These volunteers contribute thousands of hours annually to Extension and other community organizations.

MWM trainings rotate around the state, returning to a county only every 5 years or so. We anticipate another training in the Willamette Valley (Clackamas, Linn and Marion Counties) in late 2020. If interested in the MWM program, contact us to find out about pre-requisites for the training and get on an interest list. You can also contact us to request assistance from a local MWM volunteer.

Brad Withrow-Robinson (Benton, Linn, or Polk Counties) (541) 713 - 5016 brad.w-r@oregonstate.edu

MWM Class of 2019

Benton County
Diana Blakney - Corvallis
Dan Carr – Junction City
Gary Conner – Philomath
David Ehlers – Hoskins
Sarah Ehlers – Hoskins
Karen Fleck Harding – Wren
Darrell Oakes – Philomath
Dena Oakes – Philomath

Polk County
Marilyn Essex - Dallas
Erik Lamers – Salem
Michael Skindrud – Dallas
George Woodward – Dallas

Thinking of Selling? We Have Buyers In Search of Rural Properties!

Servicing the real estate needs of rural property owners and buyers since 1978, our responsive and attentive Brokers are extremely knowledgeable about zoning laws and restrictions, wells, septic systems, soils, flood zones, water rights, and other unique facets of buys and selling rural properties.
Tree Farmers of the Year

Habitat improvements, such as this in stream structure will be featured on the tour at Shiver River Benton Tree Farmer of the Year

Joe Holmberg (left) presents Otis family with plaque for Linn Tree Farmer of the Year.

Each year, the Oregon Tree Farm System, along with local chapters of the Oregon Small Woodlands Association recognize a local family or individual as Tree Farmer of the Year. These families or individuals are selected and honored for doing outstanding sustainable forest management on their family-owned woodlands. This is done to promote and support sustainable forest management and community involvement. The winners from each participating county in Oregon are then considered for the Statewide honor. Several Oregon landowners have gone on to be recognized as National Tree Farmer of the Year. The 2018 Benton County winner – Oakes Investments, LLC, Monroe went on to become the Outstanding Tree Farmer of the Year.

Linn County

Tim and Kathy Otis are Linn County’s 2019 tree farmers of the year. Together, with much help from family, they manage more than 370 acres of forestland in the Middle Ridge area between Brownsville and Lebanon. Much of the property has been in the family for more than 150 years and is now jointly held by Kathy and her three sisters, Jill Hauptman, Jan Sheets and Deanna Russell.

Benton County

Benton Tree Farmers of the Year are Diana Blakney, Sid Picht & KC Thompson. Their family property, Shiver River LLC straddles Rock Creek on the eastern flank of Marys Peak. The 171 acre property has been in the family since 1921, managed as a farm by their grandparents, and increasingly, for forestry objectives by their mother. The Benton County Tree Farmer of the Year Tour will be Saturday, September 21. Please see the Benton or Linn County OSU Extension website for details.

We will tour the property with family members and their long-time forester Scott Ferguson. We will see results of long-term family management plus the most recent activities including diversity-focused thinning and riparian area improvement projects. The tour is followed by a lunch provided by the Benton Chapter Oregon Small Woodlands Association (OSW A).

Cost Share Money Available for Woodland Conservation Work

The USDA Natural Resources Conservation Service (NRCS) recently announced sign up windows for two conservation implementation strategies (CIS) to help private landowners do conservation work on their properties. One is a familiar program suitable for oak habitats. The other less-well known and utilized CIS applies to conifer forests.

The Forest Resistance and Resilience CIS is an excellent fit for many family forest landowners who are interested in preserving natural resources on their land. The NRCS can offer assistance to help address many very popular landowner objectives, such as improving forest health and resilience to stress, increasing its attractiveness to wildlife and resistance to wildfire. Assistance may be available to help you achieve these things by developing a management plan, planting trees and shrubs, controlling invasive weeds, and thinning young stands.

To learn more, you can attend an informational session on Wednesday, September 4 in Alsea, or join a woodland tour highlighting conservation practices October. Please see the Benton or Linn County OSU Extension website for more information about these events.

The sign-up period for 2020 application will end this winter. For program details, contact Amy Kaiser, District Conservationist NRCS in the Tangent Field Office amy.kaiser@usda.gov 541-801-2671.

Crop Notes continued from page 10

- Avoid BYDV (transmitted by aphids) and reduce disease pressure. Earlier plantings require an insecticidal seed treatment.
- Conventional wheat drilled mid-Oct should be seeded at 60–90 lb/ac (depends on seed size). Later and no-till plantings should be drilled at 100–140 lb/ac. If broadcasting, increase seeding rate by 1.5–2 times.
- Plant Bobtail and Rosalyn in Oct. Other varieties may be planted later. Yamhill is still recommended for wetter soils.
- Apply 20 lbs N/ac at planting for winter wheat following a grain crop.
- Use Axiom, Zidua, or Anthem Flex for control of grass weeds. Ensure wheat is seeded 1-1.5” deep and the majority of wheat has germinated and is emerging to maximize efficacy and provide good crop safety. Axiom is not recommended for use on Yamhill wheat due to Yamhill’s sensitivity to metribuzin.
- Pre-bait for slugs before crop emergence and use in-furrow or dribble banding in no-till fields where slug problems are expected.

Mint

- Sample for mint root borer larvae in the first 2 weeks of Sep. Take square foot soil samples 2-3” down, and take ~20 samples/100 acres.
- Consider sampling residual soil nitrogen to check fertilizer efficiency.
Calendar of Events for Linn & Benton Counties

September

8.23-9.2 Oregon State Fair, Salem
- Benton County Master Gardeners staff the Corvallis Farmers Market on 1st Street in Corvallis from 9 a.m. to 1 p.m., on the second and fourth Wednesdays and Saturdays starting in May and ending the last Saturday day in October.
- Linn County Master Gardeners staff the Albany Farmers Market at 4th & Ellsworth in Albany from 9 a.m. to 1 p.m., on the first and third Saturdays from May through the end of October.
- 2019 Dry Farm Field Days, 4-6 p.m., OSU Vegetable Research Farm, 4306 NE Electric Rd, Corvallis, registration required
- 2019 Dry Farm Field Days, 3-5 p.m., Gathering Together Farm, 25159 Grange Hall Rd, Philomath, registration required
- Benton County Public Safety Chili Cook Off, starts at 3 p.m., at the Philomath Frolic & Rodeo grounds at Skirvin Park
- Lebanon Second Monday Lunchtime Gardening Series – Crafts, Gifts & Decorating from the Garden, 12-1 p.m., The Lobby Coffee Shop, 661 S Main Street, Lebanon
- 2019 Dry Farm Field Days, 4:30-7:30 p.m., Gowen Farm, 9040 Old Fort Rd, Independence, registration required
- Well Water Clinic, Lebanon Farmers Market, 3-6 p.m.
- Sustainable Lawn School, 10 a.m. to noon, Lewis-Brown Horticulture Farm 33329 Peoria Rd, Corvallis, pre-registration required
- Walk in the Garden – Harvesting Produce, 9-10:30 a.m., Edward C Allworth Veteran’s Home, Lebanon
- Linn County Small Woodlands Association Annual Picnic, 11 a.m. - 2 p.m., Sunnyside Park 44930 Quartzville Drive, Foster, free and open to the public
- Sweet Home Saturday Gardening Class series – Lawn Care, 11 a.m. - noon, Hoys Hardware, Sweet Home
- Evenings at the Gardens, 6-7 p.m., at the Benton County Event Center and Fairgrounds, free and open to the public
- Benton County Tree Farmer of the Year Tour and Picnic, 8:30 a.m. to noon, lunch will be served post-tour, cost $5, pay at the event, RSVP required by noon, Monday, Sept 16

October

- Master Gardeners staff the Corvallis Farmers Market on 1st Street in Corvallis from 9:00am to 1:00pm on the second and fourth Wednesdays and Saturdays starting in May and ending the last Saturday day in October.
- Linn County Master Gardeners staff the Albany Farmers Market at 4th & Ellsworth in Albany from 9 a.m. to 1 p.m., on the first and third Saturdays from May through the end of October.
- Mason Bee Cocoon Care Classes, morning and evening classes at different locations in Linn and Benton Counties in October and November, pre-registration required. Visit https://extension.oregonstate.edu/linn/events/linn-county-mason-bee-cocoon-care-classes for all the dates and locations.

On-farm Compost continued from Page 13

- of Type 3 feedstock during a calendar year
- Composting less than 40 tons of Type 3 feedstock with in-vessel container system (which are designed to prevent vectors and nuisances)
- Composting operations that produce silage on a farm for animal feed
- Home composting operations
- Farms that possess a Confined Animal Feeding Operation water quality permit (CAFO) issued by the Oregon Dept. of Agriculture, when the composting facility is incorporated into the operating plans required by the CAFO permit.

More information can be found at: https://www.oregon.gov/deq/mm/swpermits/Pages/Composting-Regulations.aspx

Each farmer should look closely at his or her own farm and financial resources to determine whether or not it would be advantageous to adapt and dedicate the space, labor/time, and equipment to composting (Runk, 2019). If you think on-farm composting may be a good fit for you, then these resources will help you dive deeper and get your composting operation started:

Recommended Resources:
- Agricultural Composting and Water Quality, Oregon State Extension 2013 https://catalog.extension.oregonstate.edu/em9053
- No Turn Cold Composting, Oregon State University Extension https://extension.oregonstate.edu/gardening/techniques/no-turn-cold-composting
- WSU Compost Mix Calculator https://puyallup.wsu.edu/soils/compost-mix-calculator/

References:
- Sideeman. 2006. Composting in the Back Yard or on a Small Farm
- Smith. 2019. Composting in the Home Garden, University of Illinois Extension
- Smith and Friend. 2019. Composting for the Homeowner, University of Illinois Extension

http://extension.oregonstate.edu/benton