SNAP-Ed Helping Boost Community Health

By Mitch Lies, 
GROWING Editor

Once a month, staff at Linn-Benton Food Share compile boxes of food for low-income seniors who participate in the USDA’s Commodity Supplemental Food Program. The program provides “a good source of the nutrients typically lacking in the diets of the beneficiary population,” according to the USDA.

Often, however, the beneficiaries are unfamiliar with how to cook food provided in the program, according to Susan James, a program coordinator for the Food Share. Enter Tina Ann Dodge, senior instructor with family and community health for Linn and Benton County Extension Service, who heads the counties’ SNAP-Ed program, or Supplemental Nutrition Assistance Program Education.

Working through SNAP-Ed, Dodge provides recipes to participating seniors and, prior to the recent pandemic, conducted tastings three or four times a year.

“It was a big hit,” James said of the tastings. “A lot of times, people will get food in the boxes that they aren’t use to. The Extension Service would make recipes from the food we were giving out that month and print them out and provide that to the client base.”

A federal program begun in 1988, SNAP-Ed was created as an outreach for the federal food stamp program. It is designed to help people shop and cook healthy meals and make the most of their SNAP dollars, or food stamps.

Locally, the Oregon State University Extension Service staffs SNAP-Ed through its Family and Community Health program for Linn and Benton counties. In addition to working with Linn-Benton Food Share, SNAP-Ed partners with qualifying schools to bring nutrition-based and activity-based education to students and families.

The program works with six schools locally, four in Albany and two in Corvallis, and is targeting a seventh it hopes to bring on board this fall.

Schools targeted are typically Title 1 schools, a U.S. Department of Education designation for schools with high numbers of students at risk of failure and living at or near poverty. Schools participating in SNAP-Ed in Albany include three Title 1 schools, South Shore, Sunrise and Waverly. The fourth, Periwinkle, is not part of Title 1 but is still considered an under-resourced school, Dodge said.

In Corvallis, Lincoln and Garfield elementary schools participate. The program hopes to add Monroe Elementary School this year, Dodge said, a school with a high rate of low-income families.

Adding a school involves an assessment that includes observations of a school’s physical environment, its policy environment and how people interact within those environments. SNAP-Ed staff then meet with school stakeholders and design a workplan based on what the school is interested in developing. “If we don’t have buy-in from the school, plans don’t go anywhere,” Dodge said.

School administrators and teachers can select from a variety of SNAP-Ed programs to enhance their curriculum, including direct education in the classroom and after-school activities. SNAP-Ed also trains teachers how to provide physical activities in classrooms, helps with school gardens when asked and provides nutrition education in Spanish when needed.

Katy Allaback, lead preschool teacher at Waverly Elementary, said SNAP-Ed has been invaluable in her efforts to educate preschoolers about nutrition.

“Our preschoolers love the Food Hero Passport Program,” Allaback said in reference to a popular SNAP-Ed program. “Extension staff are so well organized. Each week they organize their program around a specific fruit or vegetable. They lead fun, whole-group activities with the children, and then we all get to enjoy a sample of a healthy recipe made with the specific produce item.

“I love how staff respect each child’s response to the food – never pushing them to taste, but instead giving them ways to familiarize themselves with a food that may be new to them,” Dodge added.

Continued on Page 20
Food Preservation help
Get your gauge tested

Gardens are bursting with produce and food preservation is in full swing. To be sure that you are canning safely, it is important to have your dial pressure canner gauge checked yearly. The OSU Extension Service Food Preservation Program has a facebook page with lots of helpful information and tips. They have also been going “live” every Monday from 10-11 a.m. where they answer food preservation and food safety questions in real time. Another source of help is Extension’s Ask An Expert site. There you can ask questions about any number of topics – not just food preservation – and an Extension expert in the topic area will answer your question.

The Canning Timer and Checklist app is for your phone or tablet and runs you through a checklist of tasks and times to successfully preserve vegetables, fruits, meat, seafood, and pickles. There are also many helpful publications available for you to download (or you may request pubs from your Extension office and they can be mailed to you).
- Food Preservation & Safety Hotline: 800-354-7319 (mid-July to mid-October)
- OSU Extension Service Food Preservation Program: https://www.facebook.com/OSUExtensionFoodPres
- Ask an expert email: extension.oregonstate.edu/ask-expert
- Canning Timer and Checklist App: beav.es/4e9
- Food Preservation publications: https://extension.oregonstate.edu/mfp/publications
- National Center for Home Food Preservation: nchfp.uga.edu

To have your dial pressure canner gauge checked:
- OSU Extension Food Preservation Program Banners are displayed in local Bi-Mart stores to help consumers locate easy help and tips.
- The OSU Extension Master Gardener Gardens are bursting with produce
- Download Pickling Vegetables
- 4-H Wildlife Steward Educator Workshop - Brand New Format!
- “Carbon & Climate - a Complex Issue”

Join us as we learn to engage students in hands-on outdoor activities that help them to accurately collect and convey climate data, and engage them in thinking critically about issues related to climate science. Designed for classroom and informal educators who work with students in grades 5–8th.

This hybrid format workshop includes 2 short virtual Zoom meetings and individual outdoor study time. A total of 6 PDU credits available.

Zoom Dates: October 21 & 28, 2020
Time: 3:30 p.m. – 5:00 p.m.
Participants receive unlimited access to the Project Learning Tree online module on Carbon & Climate.

For more information visit: https://extension.oregonstate.edu/4h/benton/outdoor-education-classrooms or call the Benton Extension office 541-713-5000
Sugar and Salt Options in Home Food Preservation

Sugar is often used in home preserved food. It provides sweetness, offsets acidity in pickled products, provides structure in jam and jelly, and protects the texture of frozen foods.

When canning fruit, adding sugar is optional. Fruit may be canned in water, juice, or a sugar syrup. Fruit canned in a sugar syrup will be sweeter and may have better texture. Some food preservers are concerned about the amount of calories sugar adds to the products they are making and want to reduce or eliminate the sugar or use a sugar substitute.

Sucralose, a common sugar substitute, can be used in canning and freezing in certain recipes. Sucralose is sold under many brand names with Splenda® being the most popular. If desired, sucralose may be added to sweeten water to can fruit. The sucralose will add sweetness but will not create a thick syrup or preserve the texture of the fruit. Other sugar replacements may not be suitable for canning.

Sugar protects the texture of frozen food by suppressing the freezing point of water. When food that contains sugar is frozen, the product does not freeze as hard as plain water. The damaging effects of sharp ice crystals are lessened and texture is preserved. Fruit can be frozen in a dry sugar pack or in a syrup pack.

- To make a dry sugar pack, use about 1 cup of sugar for every 2 to 3 pounds of fruit. As fruit sits in the sugar, juice will form. Record the amount of sugar added so that it can be factored in when using the fruit in a recipe.
- To make a medium syrup, dissolve 1 3/4 cups sugar in 4 cups of water. Allow 1/2 to 2/3 cup syrup for each pint of fruit; 1 1/3 cups for each quart of fruit. Syrup should cover fruit. A stronger or weaker sugar syrup may be prepared to match the sweetness of the fruit or personal preference.
- Pectin syrup can also be used to freeze fruits that have a poor texture when frozen without sugar (e.g., peaches and strawberries). To make pectin syrup, combine 1 package of powdered pectin and 1 cup water in a saucepan. Heat to boiling and boil for 1 minute. Remove from heat and add 1 3/4 cups more water and cool.

More information about freezing fruit can be found in PNW 214 Freezing Fruits and Vegetables.

When making pickles, it is important to follow research-tested recipes exactly as written. There are tested recipes for sugar free pickles. Follow those recipes, do not alter standard recipes. See PNW 355 Pickling Vegetables.

When making pickles, lower the sodium content (raise the pH) and possibly render the product unsafe to eat or quick to spoil.

Preserving and serving foods with spices and herbs adds flavor without the addition of salt. Canning and freezing may intensify the flavor of herbs. Use sparingly at first until you determine the suitability of a particular herb.

Salt and sodium may cause foods high in fat such as bacon to become rancid more quickly. Be sure to store meats in airtight wrap or containers for freezing or refrigerator storage to slow the development of rancidity.

For complete food preservation instructions see: beav.es/OSUFoodPreservationBottom of Form

Face Coverings, Shields and Masks During the COVID-19 Pandemic

By Jeanne Brandt

The virus that causes COVID-19 appears to spread from person to person through respiratory droplets produced when an infected person talks, coughs, or sneezes. These droplets can be inhaled into the lungs of people who are nearby. Spread is more likely when people are in close contact with one another (within about 6 feet). Many infected people show no symptoms, while to others, the virus is deadly. (1)

Preventing the spread of virus laden droplets through the air can prevent the spread of the virus. Filtering exhaled air can trap the droplets and prevent them from entering the airspace of others.

- “Face covering” means a cloth, paper, or disposable face covering that covers the nose and the mouth.
- “Face shield” means a clear plastic shield that covers the forehead, extends below the chin, and wraps around the sides of the face.
- “Mask” means a medical grade mask.

A group of researchers at Duke University in North Carolina analyzed the effectiveness of various types of face coverings and masks which have become a critical component in stopping the spread of the virus. They devised a testing method that uses a laser beam and cell phone to evaluate the efficiency of masks by studying the transmission of respiratory droplets during regular speech.

They found the best face coverings were N95 masks without valves — the hospital-grade coverings that are used by frontline health care workers. Surgical or polypropylene masks also performed well. Masks with valves are meant to protect the wearer and decrease protection of persons surrounding the wearer. They are not recommended to be used during this pandemic.

Hand-made cotton fabric face coverings provided good coverage, eliminating a substantial amount of the spray from normal speech. On the other hand, bandanas and neck fleeces such as balaclavas didn’t block the droplets much at all. (4)

In surprising results, a fleece face covering resulted in an increase of droplets being dispersed into the air because the larger droplets were broken down into smaller droplets, which stay in the air longer.

“We were extremely surprised to find that the number of particles measured with the fleece actually exceeded the number of particles measured without wearing any mask,” Martin Fischer, Ph.D. said. “We want to emphasize that we really encourage people to wear masks, but we want them to wear masks that actually work.”

“If everyone wore a mask, we could stop up to 99 percent of these droplets before they reach someone else,” Eric Westman, MD, MHS said. “In the absence of a vaccine or antiviral medicine, it’s the one proven way to protect others as well as yourself.” (3)

In Oregon, at the time of this publication, face coverings, shields or masks are required for all people, ages 5 and up in all indoor public spaces and outdoors anywhere physical distancing isn’t possible. This is regardless of what phase of recovery a county is in. It is strongly recommended that children between the ages of 2 and 5 wear them as well with the assistance and supervision of an adult.

Businesses can legally refuse entrance and service to anyone who refuses to comply with this requirement. If a person with a disability cannot wear a mask, face shield or face covering, a place of public accommodation, such as a business or space open to the public, will need to work with that person to seek a reasonable modification to access their services, such as curbside pick-up, delivery, or an appointment by phone or video. A reasonable modification does not include simply allowing a customer inside without a mask, face covering or face shield. (3)

Face coverings are now also becoming a fashion statement when coordinated with an outfit or a way to convey affiliations or opinions. Fabric masks should be washed and machine dried frequently so having more than one on hand would be convenient.

OSU Extension Service encourages all our community members to take what steps you can to protect your health and the heath of others around you during these challenging times. Regular handwashing, eating a healthy diet, being active, safe gardening and farming practices and protecting your water supply are other things you can do to stay healthy. You will find information on all those topics here in GROWING.

2. https://govstatus.egov.com/or-covid-19
4. https://advances.sciencemag.org/content/early/2020/08/07/sciadv.abc3083
5. https://covid.oregonstate.edu/sites/covid.oregonstate.edu/files/care_and_limited_use_instructions_for_non_osu_produced_cloth_face_coverings.pdf
Be a Food Hero at Home!

Use this Food Hero Bingo to support positive health behaviors with your family at home. The bingo board includes 25 squares of physical activity and nutrition activities that focus on increasing healthy home Food Hero habits of eating more fruits and vegetables, eating and spending time together, being physically active, and practicing food safety.

This and other youth activities are available in English and Spanish at www.foodhero.org

Be a Food Hero at Home!

Parent Instructions:

- Name          Grade
- Did you complete this with a sibling/siblings? (please circle) Yes No

March in place for 15 minutes.
Turn off all screens during mealtime.
With an adult, visit www.foodhero.org. Together choose one new recipe to try.
Drink 8 ounces of low-fat milk.
Eat one cup of fruit.

Make a smoothie with a fruit or veggie in it.
Go screen-free and draw a picture.
Play a screen-free game.
Help plan one meal.
Eat breakfast.

Eat dinner with your family.
Do 60 minutes of physical activity in one day.
Choose a fruit or vegetable for a snack.
Read a screen-free book.
Do 20 jumping jacks.

Make a list of your family's favorite fruits and vegetables.
Drink a glass of water instead of a sugary drink.
Help cook one meal.
Find the Food Hero theme song at: https://www.foodhero.org/kids
Eat a whole grain food, like brown rice, or whole wheat pasta.

Eat two different colors of fruit in one day.
Walk around your home for 20 minutes.
Dance for 20 minutes without watching a screen.
Eat one cup of a vegetable.
Wash your hands before you eat.

4-H Youth Mental Health Survey

Mental health is a significant issue for young people in the U.S. with teens calling for more openness on mental health issues.

National 4-H Council commissioned a survey to explore teens’ perceptions and experiences around mental health. The survey, which polled over 1,500 diverse youth ages 13-19 nationwide, explored the role of resilience in mental health along with gathering youth perspectives on the state of mental health issues in their community and the nation. The survey was conducted online from May 4 to May 14, 2020.

Key Findings:

- 81 percent of teens say mental health is a significant issue for young people in the U.S., and 64 percent of teens believe that the experience of COVID-19 will have a lasting impact on their generation’s mental health.
- In this stressful climate, 7 in 10 teens have experienced struggles with mental health.
- 55 percent of teens say they’ve experienced anxiety, 45 percent excessive stress, and 43 percent depression.
- 61 percent of teens said that COVID-19 pandemic has increased their feeling of loneliness.
- Teens today report spending 75 percent of their waking hours on screens during COVID-19.
- 82 percent of teens calling on America to talk more openly and honestly about mental health issues in this country.
- 79 percent of teens surveyed wish there was an inclusive environment or safe space for people in school to talk about mental health.

So, what can adults do for the teens in their lives? The Search Institute is a non-profit organization which conducts research and develops resources, tools and practices for partner organizations to create supportive environments where every young person can succeed. They conduct and apply research that promotes positive youth development and advances equity, exactly what 4-H is all about!

Check out the Search Institute’s checklist for Building Developmental Relationships During the COVID-19 Crisis.

Express Care: Show me that I matter to you.
- Send a text, email, video, or note that says they matter to you personally and you are thinking about them during this crisis

Challenge Growth: Push me to keep getting better
- Ask young people to set one personal goal for something they want to achieve during the time away from your school or program, and then periodically check in on their progress.

Provide Support: Help me complete tasks and achieve goals
- Ask young people how they are feeling about the world, themselves, and the future during the crisis. Indicate that you

Continued on Page 20
Cleaning mason bee cocoons sounds strange at first, but research shows that cleaning can as much as triple the survival of your precious bees by reducing pests, parasites, and diseases. Note: at press time it appears that the public health situation makes in-person cocoon care classes very unlikely. To learn about upcoming events related to pollinator stewardship and mason bee care, please subscribe to BeeNotes by visiting LinnMasterGardeners.com.

For now, you can follow this checklist to get more healthy bees and better fruit and flowers in 2021.

Late October through mid-November is the optimal time to clean the cocoons. By cleaning your cocoons and getting them into your refrigerator, you are helping the bees conserve energy. Even if you forget and it is already December, cleaning them then is better than not doing it at all. Yes, there are fully grown bees in the cocoons, but they will not hatch in your refrigerator unless your refrigerator temperature gets heated up a lot. (Cooling your soups before refrigerating them is a good idea. Yes, there’s a story there.)

New Information:
Please note that we have new instructions for cleaning your blocks. We have found that there are residual mites on the block surfaces, so heating the blocks will help kill those last residual mites. Clean your tools with a bleach wash as well. If you have chalkbrood in tubes with liners replace both the liner and cardboard tube.

Cleaning & Storing Mason Bee Cocoons

Getting Cocoons out of liners and laminated blocks
- Tear liners open – like opening a tube of biscuits. Gently remove contents.
- With tool gently push cocoons out of laminated blocks – keep tool parallel to block.
- Gently separate the cocoons and brush off frass, mites, pollen balls, etc.

Washing the Cocoons: 2 oz. Bleach - 1 gallon water - 2 minutes
- Prepare COLD water for washing the cocoons.
- To one gallon of COLD water, add 4 Tbsp (2 oz.) of bleach. More is not better.
- Put cocoons in the cold water for 2 MINUTES. No longer! Bleach dissolves part of the outer silk cocoon so the use of a timer is important.
- Swirl cocoons around – you can gently massage off some of the frass and mites (brown and yellow residue).
- Take cocoons out of bleach water after 2 MINUTES.
- Rinse the cocoons in COLD water to remove bleach. This can be done in fresh water and/or a cold stream of water at your sink. You may want to use a strainer of some sort to contain the cocoons while rinsing. RINSE TWICE!

Drying Cocoons
- After you have rinsed cocoons, put the cocoons on a dry paper towel(s) and let air dry for about 1 hour. Do not use hair dryers or other sources of heat.

Storing Cocoons Over the Winter: Vegetable drawer in fridge, Oct- March
- Put a dry paper towel on the bottom of a larger container.
- Put the small container in the larger container.
- Put cocoons on the dry paper towel.
- Cover large container - lid slightly open or punch holes in lid.
- Check cocoons periodically for mold. Re-rinse in a light bleach solution (1/2 tsp per quart) for under one minute if you find mold. Air dry again.
- Check damp paper towel periodically. If it is dry, add a new damp towel.
- Note: Most refrigerators are frost free. The vegetable bin is usually more humid. The extra dampness of the paper towel adds more humidity.

Final step: BLEACH WASH YOUR TOOLS & LAMINATED BLOCKS TOO.
- Add 4-6 tablespoons of bleach to 1 gallon of water and scrub away residue. Do not soak, as that will lead to more warping.

Putting your cocoons out in the Spring – Usually Mid March to Mid April
- Subscribe to “Bee Notes”-

Note: at press time it appears
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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.

### SEPTEMBER

**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.
- 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 crane fly 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 degrees to 150 degrees Fahrenheit).
- Rake and destroy diseased leaves (apple, cherry, rose, etc.), or hot compost diseased leaves.
- 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 degrees to 100 degrees Fahrenheit.
- 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 degrees to 60 degrees Fahrenheit.
- 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.
- Plant ground covers and shrubs.
- 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.

**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 degrees to 150 degrees Fahrenheit).
- Drain or blow out your irrigation system, insulate valve mechanisms, in preparation of winter.
- 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 degrees to 150 degrees Fahrenheit).
- Dry, date, label, and store in a cool and dry location.
- Plant ground covers and shrubs.
- 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.

**Planting and 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

**Houseplants and Indoor Gardening**
- Early October: Reduce water, place in cool area (50–55 degrees Fahrenheit) 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.
No one wants to go through the winter with no clothes, not even the soil that grows our plants. So jacket up the soil in cover crops.

If you’re not acquainted with cover crops, here’s the rundown: These hardworking plants can add organic matter and aerate the soil, protect it from compaction caused by rain, suppress weeds and reduce erosion – some even add nitrogen to the soil, according to Brooke Edmunds, an Oregon State University Extension Service horticulturist.

“They’re really nice,” she said. “You can plant them and forget about them and then kick them out when it’s time.”

Not a bad deal for an almost no-maintenance plant. All that’s needed is to seed it in fall, water a couple of times until the rains start, leave it through winter and dig or till it in spring. However, timing is key, Edmunds said. You want to get overwintering cover crops seeded by September or early October so they get established before the weather turns cold and wet. It’s also important that plants are cut or mown down in spring before they set seed. Do this about four weeks before planting vegetables again so the crop decomposes properly.

Cover crops, also called green manure, include grains like winter oats and cereal rye. Legumes, such as commonly used crimson clover, Austrian field pea and common vetch, are nitrogen “fixers.” Beneficial bacteria in legume root nodules take nitrogen from the air and supply it to the plant. When the cover crop decomposes, some of the nitrogen becomes available to other plants.

Edmunds particularly likes clover because it does double duty by providing nitrogen and providing sustenance to pollinators. Be sure to pull the plants before they go to seed.

Make sure when you plant that the seed has good contact with the soil. Larger seeds like peas, vetch and cereals should be raked in lightly. Mix small seeds with sand to make them easier to broadcast and then use a sprinkler to water in. If the weather is still dry, keep the seed bed irrigated.

When it comes time to incorporate the crop, shorter plants can be tilled right into the soil, Edmunds said. If the plant is too tall to turn under easily, mow first or use a weed trimmer. Tough-stemmed plants can be cut and left to decompose above ground. Or the tops can be carted to the compost pile and the roots dug in. Either way, let the turned-under material sit for about four weeks before planting.

For more information, refer to the OSU Extension guide ‘Cover Crops for Home Gardeners’ Available online at: https://catalog.extension.oregonstate.edu/fs304 Or check out ‘Cover Crops for Home Gardeners West of the Cascades’, a publication by Washington State University with collaboration by Nick Andrews, small farms specialist for OSU Extension Available online: http://pubs.cahnrs.wsu.edu/publications/pubs/fs111e/

For beginners, Edmunds advises:
- Start with a cover crop that is easy to grow and manage. For example, crimson clover is relatively easy to incorporate into the soil.
- The first time you try cover crops, plant them in an area of your garden that you can leave for vegetables typically planted in late spring or early summer. This will buy you time to learn how to manage the cover crop residues in spring.
- Try another cover crop that fits in a different niche of your garden plan after you have successfully used one cover crop. Then when you gain experience, experiment with others.
- Consider interseeding cover crops during the summer into late-harvested crops like tomatoes.

Pam Wilson has been a Master Gardener volunteer since 2015 in Benton County. Pam is a volunteer specializing in adaptive gardening and researching garden solutions for the community.
Coronavirus Not Found in Drinking Water

By William M Alley, Ph.D., and Charles A. Job. Reprinted from Wellowner.org.

The coronavirus that causes COVID-19 (officially known as SARS-CoV-2 but referred to here as the COVID-19 virus) has not been detected in drinking water in either private wells or public drinking water systems.

Human feces would be the most likely source of the COVID-19 virus in drinking water, but according to the World Health Organization, “the risk of catching COVID-19 from the feces of an infected person appears to be low.”

Filtration and disinfection methods used in most municipal drinking water systems should remove or inactivate viruses. Despite the low risks, the question has arisen about the vulnerability to COVID-19 of homeowners with private wells and those who rely on untreated groundwater supplies.

We address this question for private well owners by reviewing (1) viruses in groundwater in general and specific characteristics of the COVID-19 virus as it relates to groundwater, (2) septic systems as a potential source of COVID-19 virus to private wells, and (3) treatment systems for private wells.

Viruses in Groundwater

In general, groundwater contains fewer microbial contaminants (pathogens) than surface water, yet the biological integrity of groundwater cannot be taken for granted. Approximately half of all waterborne disease outbreaks are associated with contaminated groundwater.

Many of these outbreaks are from wells that serve businesses or small water systems that do not require water disinfection and have minimal microbial monitoring requirements. People drinking from household wells also can become exposed to waterborne pathogens, but these outbreaks are less well documented.

Pathogens can be introduced to groundwater through septic tanks, leaking sewers, and land applications of livestock manure and septage, among other sources. Groundwater contamination also can occur from poor well design and construction.

A proper sanitary seal around the well casing is essential to block contaminants that might migrate from the land surface down to the outside of the casing (well annulus) to the water table, bypassing the unsaturated zone that naturally helps cleanse groundwater.

Human enteric viruses (those that replicate in the intestinal tract of humans) are among the microbial contaminants of greatest concern in well water. Common enteric viruses are shed in human stool in enormous numbers and commonly tied to disease outbreaks.

Reduction of pathogens in the subsurface generally relies on three processes: filtration, adsorption, and die-off/inactivation.

Filtration results when the pathogens are too large to fit through the soil or aquifer pores and cracks. The extent of filtration depends on the type of soil and rocks through which groundwater flows. For example, silts are more effective at trapping microorganisms than sands.

Filtration reduction also depends on the size of the organisms. Physical removal by pores is less effective for viruses than other pathogens because of the very small size of viruses.

Adsorption occurs when the microorganisms become attached to particles, which removes them from the water or at least delays their transport. Virus adsorption onto sediment grains is considered the primary removal mechanism in soils and groundwater, with a complex dependence on the chemistry of the sediment and water.

Travel time can be important because viruses lose their infectivity with time in the subsurface, dependent on temperature, pH, and other factors.

Soils have been found to be effective at virus removal. Rates of removal and restriction are dependent on soil texture, composition, and reactions occurring within the soil layer. At the same time, wells in certain types of aquifers, such as karst and fractured rock, are susceptible to enhanced virus transport.

The COVID-19 Virus

The COVID-19 virus is a respiratory virus that spreads by droplets from coughs and sneezes and by contact with contaminated surfaces. Coronavirus are enveloped, single-stranded RNA viruses that range from 0.060 to 0.220 microns in size. Enveloped viruses are less stable in the environment than nonenveloped viruses.

The COVID-19 virus has been detected in the feces of some patients diagnosed with the coronavirus. The amount of virus released from the body (shed) in stool and whether the virus in stool is infectious are not known.

The risk of transmission of COVID-19 from the feces of an infected person is expected to be low, based on data from previous outbreaks of related coronaviruses such as SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome).

There have been no reports of fecal-oral transmission of COVID-19 to date.

Previous coronaviruses have been reported to die off rapidly in wastewater, with a 99.9% reduction in two to three days. Coronaviruses might survive for weeks in groundwater based on limited studies of water.

Septic Systems and Setbacks

The main potential sources of viruses for homeowner wells are onsite decentralized wastewater treatment (septic) systems and sewer lines. Properly operated septic systems are designed to protect wells from contamination by pathogens, although outbreaks associated with septic systems continue to be reported. Particular concerns are associated with areas having high septic system densities.

A key concept recognized in local building codes across the nation is “setback”—a requirement that a water supply well be at least a certain distance from a septic system or sewer line to ensure adequate time for sufficient natural degradation of chemicals and die-off of harmful organisms that may endanger well water.

The setback approach as a barrier to contamination of wells is similar to the concept of wellhead protection—to keep potential sources of contamination away from wells. Setback distances take into account the soils and subsurface geology of an area or state to enable chemical degradation and pathogen die-off/inactivation to occur.

As examples, setback distances for homeowner wells from septic leach fields in Minnesota are 50 feet except for special cases. The minimum setback of a septic field from a water well in Colorado is 50 feet, but through variance the minimum setback may be 25 feet based on the hydrogeologic information for the site.

The U.S. Environmental Protection Agency (EPA) expects a properly managed septic system to treat the COVID-19 virus the same way the system manages other viruses often found in wastewater.

A second line of defense is well and septic system maintenance. Stormwater can pick up and carry viruses and other pathogens. During times or seasons of flooding, cracks in the well casing, riser, and apron around the wellhead can allow floodwater to enter the well and the annular space around the casing below ground.

Wells may be more vulnerable to contamination from viruses after flooding, particularly if the wells are shallow, have been dug or bored, or have been submerged by floodwater for long periods of time. Well disinfection may be required to eliminate the virus, which should be followed by a water test.

Treatment

In addition to the use of setbacks for wellhead

Continued on Page 10
Importance of Groundwater

By Kevin Seifert, Linn SWCD

Groundwater, the sleeping giant of our Watershed, is a hidden resource of tremendous proportion. We are told that 99 percent of all available fresh water is stored as ground water. However, little is known about Oregon’s ground water resource or quality. The Oregon Water Resource Department (WRD) has assessed ground water supplies for approximately 15 percent of the state. The Department of Environmental Quality (DEQ) has assessed the quality of ground water on only 7 percent of the state’s area.

Ground water supplies drinking water to approximately 90 percent of rural residents in Oregon. Of the 3,550 public water supply systems in Oregon, 3,050 are ground water supplied.

Ground water is also an important supplier of irrigation for agriculture, golf courses, and lawns. Irrigation accounts for agriculture, golf courses, and lawns. Irrigation accounts for approximately 15 percent of the state’s area.

To maximize protection, if a well has been flooded, the well water should be tested by qualified (certified/licensed) laboratories and, if testing positive for fecal indicator organisms, should be disinfected by a qualified water services contractor.

Conclusions

Drinking water from private wells presents a low risk for COVID-19, especially compared to direct human-to-human transmission or by touching a contaminated surface. By far and away, the best protection against COVID-19 is to follow the public health recommendations for social distancing, washing hands, and other measures.

Concerns about the COVID-19 virus in groundwater serve as a reminder of the importance of protecting against pathogens through proper care and maintenance of wells and septic systems.

The EPA, the National Ground Water Association, and many states recommend annual testing of private wells that includes indicator bacteria, analogous to an annual health checkup with a doctor. Inspection and maintenance may also be needed if problems are suspected.

Some home treatment systems, but not all, are effective against viruses when properly maintained. By itself, COVID-19 is not a reason to start drinking bottled water or installing home water treatment systems.

William M. Alley, Ph.D., is director of science and technology for the National Ground Water Association. Previously, he served as chief, Office of Groundwater for the U.S. Geological Survey for almost two decades. Alley has published more than 100 scientific publications, including the book High and Dry: Meeting the Challenges of the World’s Growing Dependence on Groundwater, co-authored with his wife, Rosemarie. Alley can be reached at walley@ngwa.org.

Chuck Job is the manager of regulatory affairs for the National Ground Water Association. Prior to that, he worked at the U.S. Environmental Protection Agency for more than 29 years, having served since 2000 as its Infrastructure Branch chief. He is a former columnist for NGWA’s Groundwater Monitoring & Remediation. Job can be reached at cjjob@ngwa.org.

for the U.S. Geological Survey for almost two decades. Alley has published more than 100 scientific publications, including the book High and Dry: Meeting the Challenges of the World’s Growing Dependence on Groundwater, co-authored with his wife, Rosemarie. Alley can be reached at walley@ngwa.org.
Update on Farm to School from our Regional (Linn/Benton) Hub Lead

By Jess Worden

My name is Jess Worden and I am the new Oregon Farm to School & School Garden Network Regional Hub Lead for Linn and Benton Counties, as well as the Farm to School Coordinator for the Corvallis Environmental Center. I have lived and worked in the Willamette Valley for the last six years. As the daughter of farmers, I have been gardening and farming for most of my life. My education and professional background are in childhood education and school gardens. In my role as the Regional Hub Lead, I work to connect producers with schools, provide educators and farmers with resources, and foster a network of support through annual gatherings of producers and school nutrition services.

Producers are connected with schools through the Oregon Harvest for Schools Portal in order to support local products and give children in this region access to fresh local produce on the lunch line. Additionally, the Corvallis Environmental Center, in partnership with the Corvallis School District, offers Tasting Tables where we feature a harvest of the month that is grown and sourced locally. These Tasting Tables provide an excellent opportunity for children across Corvallis and Philomath to try and learn about new produce that might not otherwise be available to them.

Right now, children are not occupying the physical space of schools. As we wait for the time when children will return to their

Continued on Page 19

Small Farm School 2020: Online

Small Farm School is a series of workshop sessions for beginning and experienced small-scale farmers and rural landowners. Small Farm School 2020 will be a series of online sessions running Tuesday and Thursday evenings from mid-September through mid-November. Classes will include:

- Poultry for Beginning Farmers
- Field to Market Food Safety from Farm to Kitchen
- Racism in Oregon Agriculture

Continued on Page 19

The 2020 Dry Farm Project Virtual Field Tours Continue through September

Join the virtual field tours on Wednesday mornings at 10 a.m. There are nine field tours featuring different elements of the five core projects: Tomatoes, Corn Breeding, Soil Management, Solar Co-location with Dry-Farmed Vegetables, and Variety Trials. For more details, to register, and to access recordings of the tours visit the Dry Farming Project website: https://smallfarms.oregonstate.edu/smallfarms/dry-farming.

September topics include:

**Sept. 2, 10 a.m.: Tomato Variety Trial**
What tomatoes are resilient to dry farming in the Willamette Valley’s dry hot summers? Early Girl is the standard (and the variety most grown in coastal California), but we would like to find more types, flavors and colors. This year we are evaluating 200 varieties, including scion/rootstock combinations (grafted tomatoes). In this field day we will explore the diversity and identify high performers.

**Sept. 9, 10 a.m.: Bean Variety Trials**
This year, we are expanding our dry bean variety trials (sponsored by The Dry Farming Institute) to include four new Phaseolus vulgaris (common bean) varieties, as well as several Phaseolus acutifolius (tepary bean) varieties, a drought tolerant species that originates from the southwestern United States / Northern Mexico region. We will highlight our tepary bean variety trial and the promise of growing tepary beans in the Pacific Northwest, as well as ongoing breeding projects involving both legume species, and a general discussion on the pros and cons of irrigating vs. dry farming dry beans.

http://extension.oregonstate.edu/linn
Winter Meetings Cancelled

It is with regret that we announce that two major Oregon grass seed industry meetings have been cancelled due to concerns over the spread of COVID-19.

The Oregon Seed League meeting, which is held in Salem each December was cancelled on August 3.

The Oregon Ryegrass Growers Association annual meeting, which is held at the Linn County Fairgrounds in January, was also cancelled around August 3.

“It is unfortunate, but we don’t feel like we are going to be allowed to hold a meeting that large at that time,” said Laurie Gibson, Oregon State University Extension liaison to the ORGA.

The decision to cancel Seed League came down to similar concerns, according to Bryan Ostlund, executive director of the Oregon Seed Growers League.

“Nobody wanted to cancel it,” Ostlund said, “but with the governor’s current rule on gatherings, an uncertainty over what’s coming our way in the next few months and the potential financial liability, it was a decision the board felt was necessary.”

Extension Fall Grower Meetings Going Virtual

By Mitch Lies, GROWING Editor

OSU field crops Extension agents Nicole Anderson and Betsy Verhoeven announced on August 10, that the fall Seed and Cereal Crop grower meetings, typically held each September, are going virtual.

“All summer long, we were holding out hope that maybe we could have in-person meetings,” Anderson said. “But it is very difficult, based on past attendance records, to see how that would be possible.”

The half-day meetings, regularly held at three sites over two days, typically draw about 300 people over the course of the two days, well in excess of the state’s limits for indoor gatherings.

“Obviously COVID-19 isn’t slowing down farming and it isn’t slowing down issues farmers face, and there is important information to get out to growers, so we thought we’d give this virtual concept a shot and see how it goes,” Anderson said.

Also, she said, with other meetings being cancelled, such as the Oregon Seed Growers League’s annual meeting and the Oregon Ryegrass Growers Association’s annual meeting, both of which were cancelled the week of August 3, the opportunity for growers to obtain pesticide recertification credits, which are needed to keep applicator licenses current, are minimal.

“We thought that one thing we could do to help our seed and cereal growers is to continue to try to deliver education that qualifies for pesticide recertification credits so there were some opportunities for people to continue to maintain their licensing requirements,” she said.

Meeting lengths are being scaled back to 1.5-hour sessions, rather than the typical four-hours, and are being offered on three dates: September 16, September 17, and September 23. All sessions begin at 8:30 a.m., and growers wishing to obtain pesticide credits need to pre-register for the Zoom webinars.

Applicators who pre-register and participate in the 90-minute meetings are eligible for one ODA pesticide recertification credit per meeting.

The first meeting will include presentations on vole management and soil fertility; the second will include presentations on slug control and fall weed management; the third session will include information on wheat production as well as an opportunity to meet the new CEO of Oregon wheat, Amanda Hoey.

“Our goal with these meetings is to try to provide not only up-to-date research-based information to growers, but also to discuss any of the more relevant topics that have popped up in the most recent growing season or need to be considered for the future growing season,” Anderson said.

The webinars are free.

The registration link for the first meeting (voles and lime) is https://beav.es/oZB;

The registration link for the second meeting (slugs and weeds) is https://beav.es/oZA;

The registration link for the third meeting (wheat) is https://beav.es/oZR.
Fall Tree Fruit Pest Management

By Erica Chernoh

With summer coming to an end, it is time to start looking towards some tree fruit management practices for the fall. Fall is an important time for managing two important pests of apple trees, anthracnose and scab. If you grow apples or pears, then you have probably seen scab. In apples, scab (Venturia inaequalis) causes brown spots on the leaves and fruits. The spots can vary in size, from a small pinpoint, to larger spots that develop a cork-like appearance. Scab overwinters in fallen leaves and fruit. Good sanitation is important to managing scab, rake up and remove fallen leaves and fruit. Anthracnose (Cryptosporiopsis curvispora, sexual: Neofabraea malicorticis) is another common fungal disease of apples that causes cankers on stems and branches, and post-harvest fruit rot (also known as Bull’s-eye rot). Infection occurs in the fall when fall rains spread the fungal spores to young limbs and twigs, though the cankers won’t appear until the following spring. To prevent the spread of the disease, spray a fixed copper before the onset of fall rains, and prune out and destroy infected branches and rotted or mummified fruit from the trees.

If you grow peaches or nectarines, unless you are growing a resistant variety, you probably have had to deal with peach leaf curl and shothole fungus. Peach leaf curl (Taphrina deformans) and shothole (Thyrostroma carpophilum) are the two most common diseases of peaches in Oregon. At the farm level, there are several products that are registered for use that provide excellent to good control of peach leaf curl and shothole. Consult the 2020 Pest Management Guide for Peaches EM8419, from the OSU Extension Catalog for a list of options (https://catalog.extension.oregonstate.edu/em8419). For home owners, your best options to control shothole and peach leaf curl are copper and chlorothalonil. Copper is effective against shothole but less so against peach leaf curl. Chlorothalonil is good for both, but not as effective as some of the materials that are available for commercial farmers. For peach leaf curl, two fungicide applications during the dormant season are recommended for Western Oregon: one in late October/early November (at about 50 percent leaf fall), and the second just before bud swell (usually in late February, before the floral buds open). For shothole, you need to spray copper around Thanksgiving and again around Christmas.

Pruning is also an important measure for reducing disease presence in most orchards. It is ideally done in the dormant season before bud break to remove congestion and increase air flow, which speeds drying of leaves and fruit after spring rains.

Picking and Storing Apples and Pears

If you grow apples, you are probably watching them size up on the tree and wondering if they are ready for picking. Some varieties, such as Gravenstein and Chehalis, mature and ripen up in late August, whereas other varieties, such as Jonagold and Liberty, mature in September and October. If you are uncertain of the variety you have, or are trying to figure out if the fruit is ripe, there are some indicators of ripeness that you can look for. Obviously, taste is one way to determine ripeness, but color can be another indicator. A yellow variety will turn from green to yellow once it is mature. For reddish varieties or those with red stripes, the non-red portion of the fruit will generally change from green to yellowish when mature. Another indicator is how easily the fruit separates from the tree, with mature varieties separating easily. When harvesting apples, twist the fruit upward with a rotating motion instead of pulling downward. Finally, when a few apples begin dropping to the ground, the apples on the tree are nearly mature.

Unlike apples, pears generally don’t ripen well while still on the tree, and some varieties, such as Anjou and Bosc, require cold storage in order to ripen properly. For more information about apples and pears, you can access a publication titled Picking and Storing Apples and Pears FS147, from the OSU Extension Catalog online at https://catalog.extension.oregonstate.edu/fs147.
The 2020 Lee Allen Memorial Youth Market Auction sold 195 animals totaling $417,000! Thanks to all the buyers for their support of 4-H members! Thanks to the Benton County Final Drive 4-H Club and leaders Dianne and Mike Schmidt for raising the donation animal this year. The donation animal is raised by a different Benton County 4-H Club each year and is sold at the youth auction. The money goes into the Steve Moos scholarship fund and each spring, scholarships are given to deserving Benton County 4-H large animal graduating senior members. The scholarship started in 1982, and to date 102 scholarships have been given out. Twenty-nine different 4-H clubs have raised a donation animal and has raised over $216,000. The 2020 recipients of the Steve Moos scholarships are Reed Vega, Sierra Forester, and Abigail DeVries.

The auction committee will provide club leaders the contact information for the 4-H members’ buyers to write their thank you notes. The club leaders will then share that information with 4-H members once they receive it.
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 1st! This fall 4-H may look a little different due to COVID-19, but we are still committed to providing quality, positive youth development experiences to our youngest community members. Youth who are 9-19 years of age as of September 1, 2020 are eligible to join 4-H. We also offer a 4-H Cloverbud program for children 5-8 years old as of September 1, 2020. Cloverbud members explore a variety of topics, while developing social skills in a non-competitive environment.

If you are interested in learning more about the opportunities that 4-H offers, please visit our Benton County Extension website where you can submit a member interest survey.

Virtual 4-H Fashion Revue

In a normal year, April would mean that dozens of 4-H members would flock to Milam Auditorium on the Oregon State University campus for their annual 4-H Fashion Revue Contest. The contest includes classes where youth make their garment, buy/borrow an outfit on a set budget, create a garment according to a challenge set for the year, and more. They may look a little different due to COVID-19 continued, the 4-H families agreed that they would still be interested in participating virtually. In mid-July, youth participated in the construction (creating a garment), ready to wear (creating an outfit with a tight budget), costume (used or new), and mask (costume or COVID style) classes. They met with their judge through a Zoom meeting, modeled their outfit/garment, and participated in an interview. 4-H members of all ages, including Cloverbuds (the 5-8 year old 4-H members), participated in the new process.

Since a public show was not available, participating members have shared photos of themselves in their garment or outfit. A video slideshow is available to view on the Benton County 4-H Facebook page.

Papa’s Pizza 4-H Fundraiser
October 7

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 7. 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 visit our website to locate the flyer. Thanks in advance for your support!

Are You a Scientist?

When you think of a scientist, what visual image do you see? A caricature of an older white haired man in a lab coat with his glasses falling down his nose? Commonly, this is the image many youth and adults imagine when they think of a scientist. A new program is working to alter that image and more accurately reflect modern scientists that come from backgrounds as varied as the fields in which they work.

I am a scientist is a visual storytelling initiative to introduce students to diverse scientists, sciences, and pathways to careers in STEM fields. The program is a collection of 20+ toolkits that can be downloaded and used in your classroom. The project is designed to break stereotypes about scientists, while introducing students to a wide range of STE(A)M fields. Each toolkit profiles the science and story of a real world researcher and includes stories, posters, and career resources that highlight 22 scientists’ range of personalities, backgrounds, pathways, and passions.

This program developed by Harvard University is building classroom tools to make STE(A)M careers technically and psychologically accessible to all students by breaking down barriers like race, gender, and personal interests. To learn more visit: https://www.iamascientist.info/.

4-H Members Having Fun with their Animals

Along with the showmanship, market, and breed classes, 4-H members had the opportunity to participate in an online costume contest with their pets and livestock. Photos of animals in cowboy hats, fairy wings, and other fun outfits poured in to be considered. The photos were shared on the Benton County 4-H Facebook page for public viewing. Votes were tallied for three top People’s Choice Awards. A guest judge also picked their top three costumes for the Judge’s Choice Awards.

Thank you to all of the participants for brightening everyone’s days with their fun costumes!

People’s Choice ……………………………… Abby and the Patriotic Pig
People’s Choice ….. Chloe and Beauty (sheep) and Iggy Boom Boom (dog)
People’s Choice ……. Chloe and Lola the pandemic work from home pug
Judge’s Choice………….. Wyatt the fireman with Huckleberry the engineer and Kit cat the passenger
Judge’s Choice…………………………… Daven and Tank Bunny
Judge’s Choice………………………. Willamae and Super Lucky
What makes 4-H possible?

Volunteers are key...

The question has been asked many times, especially lately in this new way of life. How can we continue with 4-H? For a successful 4-H program we need two key ingredients: youth with a passion and volunteers with those same passions. Even though we are facing new obstacles that we haven’t seen in the past, we are working hard at making 4-H available to the youth of Linn County. Our volunteers are committed to seeing that the needs of the youth that they work with are being met.

According to the Cambridge Dictionary the definition of a volunteer is a person who does something – especially helping other people – willingly and without being forced or paid to do it. So many volunteers demonstrated this exact definition during July when they made the live and virtual livestock and small animal shows a success. So many people came together with the same common goal and made sure that the youth in our county had the best opportunity possible.

In Linn County we always welcome new volunteers, we provide training and resources for the areas that interest you. Please call our office at 541-967-3871 to learn more about volunteering with the 4-H Program.

Become a 4-H member

The 4-H year begins October 1st! This fall 4-H may look a little different due to COVID-19, but we are still committed to providing quality, positive youth development experiences to our youngest community members. Youth who are 9–19 years of age as of September 1, 2020 are eligible to join 4-H. We also offer a 4-H Cloverbud program for children 5–8 years old as of September 1, 2020. Cloverbud members explore a variety of topics, while developing social skills in a non-competitive environment.

If you are interested in learning more about the opportunities that 4-H offers, please visit our Linn County Extension website where you can submit a member interest survey.

Seeking Entrepreneurs!

Do you like making things? During this time of being home more have you discovered a new talent or craft that you enjoy? We will be starting an entrepreneur club that will work with 4-H members to help them move their craft or hobby into something more. Come learn about how you can use your talents to help you earn some money, learn about business plans and marketing. We have so many talented youth in Linn County, let’s get together and share your talents. Please email Andrea Leao at andrea.leao@oregonstate.edu for more details.

Finding Direction

By Paul Smith, Linn County 4-H Youth Program Coordinator

Discovering passions and a sense of purpose in life is not always easy. It is especially hard for young people whose life experiences are still limited. While some young adults are able to pinpoint what they are passionate about, many youth struggle to identify what motivates them or gives them a sense of purpose. Oftentimes, that sense of being lost can carry into adulthood, which can be problematic for many reasons. The good news is that 4-H exists to help youth discover their purpose and feel a sense of belonging. Studies have shown that 4-H members are four times more likely to make contributions to their communities, twice as likely to be civically active, twice as likely to make healthier choices in life, and nearly twice as likely to participate in science programs during out-of-school time.

There is a recipe for that kind of success. In the 4-H world it is referred to as the 4-H Thriving Model. There are different ingredients required for success to happen, and it all starts with youth sparks, or interests. When youth are involved in programs that are well structured and involve caring and supportive adults, the possibilities for their success grows tremendously. It allows youth to open up to challenges, adopt a growth mindset, find purpose and realize that there is a big world out there in need of leaders. They may even come to find that they are equipped to be those leaders.

One of the ways that Linn County youth can get involved in 4-H is through a new explorers club, which is for youth ages 9–14. This club is ideal for youth who are new to 4-H, exploring new interests, or simply looking to make new friends in a fun, educational environment. In the explorers club youth have the opportunity to learn and participate in a variety of subjects and activities, including communication, outdoor survival skills, first-aid, Science, Technology, Engineering, Art and Math (STEAM), community service, and much more. The goal of the club is to allow youth to explore a variety of interests so they may generate some sparks that lead to larger passions in life. The explorers club is also looking for adult volunteers who are seeking opportunities to help youth thrive. There are both long-term and short-term adult volunteer opportunities. Finding direction in life can be a challenging obstacle, but there are caring adults and proven paths that have helped youth find success for more than a hundred years. 4-H prides itself in developing youth, and will continue to do so for many more years to come. Those interested in finding out more about 4-H are encouraged to contact their local 4-H office. For further information about 4-H or the explorers club, please contact Paul Smith by phone 541-730-3469 or by email paul.smith@oregonstate.edu.

When we help ourselves, we find moments of happiness. When we help others, we find lasting fulfillment.

- Simon Sinek-
The auction committee couldn’t be more pleased with the support from our 2020 Buyers and Supporters. The community came out and supported the youth of Linn County in ways we never expected! We had a record number of Add-Ons, and the kids received amazing support from our buyers. We also would encourage you to patronize the businesses listed here in order to help us all continue to be able to support this auction in future years.

- LCYLA Ag Boosters
- Advanced Mechanical
- Ram Trucking
- Weyerhaeuser Santiam Lumber
- Farmland Tractor
- Tiger Lights
- Cascade Timber Consulting, Inc.
- Anderson Ranches
- Stahlbush Island Farms
- Coastal Farm
- Linn Vet Hospital
- Timber Harvesting Inc
- H & K Meats
- Les Schwab
- Morley Thomas Law
- Radiator Supply House
- JZ Trucking LLC
- Pimm Farms
- Nutrien Ag Solutions
- Mid Valley Farms Inc.
- River’s Edge Pet Medical Center
- Elite Equipment Rental
- Robb Farms
- Blue Lace Farms

A special thanks to the auction committee that worked tirelessly to make sure that the youth had such a great outcome in a year that has been anything but predictable! Rob Damon, Donald Fleckenstein, Stacey Lyle, Jason Lyle, Alissa Curry, Matthew Mehlschau, Sarah Neuschwander, Kathy Smith, Brenda Phearson, Blaine Suing, Hannah Glaser, Lea Tharp, Maddie Neuschwander, Geoff Davis, Martha Glaser, Adam Haile, Adrienne Lulay, Abby Suing and Declan O’Hara.

The auction committee also happily awarded college scholarships to Elizabeth Beck, Gracie Krahn, Wyatt Wilson, and Mackenzie Crenshaw.

Linn County Youth Livestock Auction a success!

Ashley Goodenough, Intermediate Reserve Champion in Rabbit Showmanship

Ava Cyrus, Intermediate Reserve Champion in Poultry Showmanship

Wyatt Cyrus, Junior Reserve Champion in Poultry Showmanship

Brianna Clark, Intermediate Champion in Poultry Showmanship

Luke Milburn, Senior Champion in Poultry Showmanship

Ben Bjornstedt, Junior Champion in Rabbit Showmanship

Laurel Bjornstedt, Intermediate Champion in Rabbit Showmanship

Daisey Lalonde Grand Champion steer

Emma Faville Grand Champion Turkey

Ella Miller Grand Champion goat

Cole Weber Grand Champion lamb

Gracie Krahn Grand Champion swine

Kaylee Silacci reserve champion steer

Photos by Maddie Jo Photograpy
A familiar summer tradition among local woodland owners is the County Tree Farmer of the Year Tour and Picnic. These events recognize and celebrate a local landowner or family for their outstanding forest stewardship and community involvement.

Like so many face-to-face traditions, the tours are not happening this year. Nevertheless, the Oregon Tree Farm System and local chapters of the Oregon Small Woodlands Association selected County honorees. Let’s meet our local Tree Farmers of the Year.

**Benton County - Crestmont Farm**

Ed Easterling, Benton County’s 2020 TFOY established Crestmont Farm in 2005 on 775 acres of intensively managed, heavily-harvested industrial forestlands with the objective of balancing wood production and habitat management. He immediately began working with consulting foresters and others to maintain and enhance the forest plantations while looking towards restoration of the property’s other resources.

Over the past 15 years, Ed and his team have transformed industrial timberlands just west of Corvallis into a community resource. Crestmont farm has expanded to approximately 1,600 contiguous acres. This diverse property now includes traditional timber plantations, mixed-species naturally regenerated forests, oak woodlands and savannas, multiple riparian zones and open pastures. There is also critical habitat for several threatened, endangered, and declining species of animals and plants.

The property provides personal recreation and a series of public trails supported by informational signs. They are open and used for private and public tours, educational meetings and research.

Ed has accomplished so much in this time in part due to his penchant for - and long professional experience in - developing and executing long-term, multiple-benefit management plans. The forest management plan helps identify and prioritize objectives, take advantage of converging objectives and minimizing impacts among those that compete.

Ed’s Key objectives include:

- creating long-term economic value by producing materials that support the improvement of people’s lives,
- demonstrate responsible natural resource stewardship by managing for (a) habitat diversity, (b) forest, woodland, and pasture health, and (c) ecological integrity to benefit wildlife, plants, and people,
- address the effects of a changing climate on agricultural production and habitat management,
- manage to reduce the risk of damage by wildfire on timber, structures, and people, and
- develop recreational, educational, and research experiences.

**Linn County - Bogwood**

Linn County’s 2020 Tree Farmers of the year, Lee Peterman and Shirley Jolliff, have owned their 80 acre “Bogwood” property near Lacombe since 2013. The property has a mix of wet prairie and oak (the property’s namesake) down low, and young conifer stands rising up the hill. Lee and Shirley are passionate about their property. That passion in seen in their work to restore more than 20 plus acres of wet prairie, oak and hardwoods near the center of the property. It is also reflected in their hands-on approach to work on the property, a commitment to being wholly solar powered, and also Lee’s leadership and work with landowner organizations including OSWA, the South Santiam Watershed Council and Willamette Valley Ponderosa Pine Conservation Association.

When they arrived, the prairie was a nearly impenetrable thicket of invasive English hawthorn, Scotch broom and blackberries. Working with the NRCS and other groups, Lee tackled the eradication of the invasives with stubborn brute force, using hand tools and electric powered tools, with some selective use of herbicides. Native forbs, grasses and shrubs are now making a comeback in the newly opened areas. Shirley tends a small prairie plant nursery growing many other flowering plants such as Clarkia, mallow and milkweed to enrich the prairie’s plant diversity.

The brush and trees removed in the prairie restoration and also the woodland thinning operations may be piled and burned but are just as likely to end up as part of habitat improvement at Bogwood, or a South Santiam Watershed Council restoration project. Bogwood’s small electric sawmill is another possible destination. Lee uses boards and round wood of all sizes to craft a wide variety of useful things including birdhouses, bat boxes and handles for traditional corn brooms made in Eugene.

I have enjoyed visiting the diverse Crestmont Farm property and talking to Ed about the challenges of managing all the pieces of this large puzzle to meet his different objectives. At Bogwood I have enjoyed watching the prairie be reopened and seeing prairie plants emerge from among the hawthorn stumps. These TFOY honorees and their properties have stories to share and secrets to reveal. The tours – when they eventually happen – will be great opportunities to learn from the hosts’ years of effort and experience. In the meantime, congratulations to Ed, Lee and Shirley.

**Thanks to Ed, Lee and Shirley, and also Dave Hibbs and Joe Holmberg for contributing to this story.**

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**Ed Easterling at Crestmont**

**Shirley Jolliff and Lee Peterman at Bogwood**

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http://extension.oregonstate.edu/benton
Enroll your Classroom in the 4-H Wildlife Steward Program

With the current challenges of gathering groups in indoor spaces, consider spending more time outside the classroom door with your students.

Join nineteen other classroom teachers (2019-2020) in participating in the Benton County 4-H Wildlife Stewards outdoor learning program. Evaluations from teachers say that outdoor learning helps make natural science “real” for their students and participation in the annual youth conference helps them meet standards in science, speech and presentation, research and expository writing.

Fall is the time of year to enroll your classroom and take advantage of the student opportunities in this yearlong program:

- **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 and up to six PDU’s/workshop.
- **Learn Outdoors Month** (October). All registered teachers receive a classroom poster to display your commitment to outdoor learning. Student Nature Photo Contest is open.
- **Teaching Kits** - from “Animal Adaptations” to “Water Quality,” more than 30 outdoor teaching kits are available for check out. Call our office at 541-713-5000 to reserve the free kits for up to 2 weeks. **Due to Covid-19 some kits may be unavailable.**
- **Nature Field Journal Contest** (March). Students submit a finished field journal page; receive feedback from a judge and receive a participation ribbon. Fourth grade and over are eligible for awards.
- **4-H Wildlife Steward Youth Summit** (May). A daylong youth conference with more than 200 student project presentations and exciting hands-on activities.
- **Mini-grants** - $200 per school for materials to support your outdoor learning projects.
- **4-H Four Rivers and 4-H Wildlife Stewards Camp** (students from 4-H WS classrooms are eligible to apply for scholarships for these overnight resident camps near Salem).

If you are a **Home School Group or small Cohort of Parents** teaching at home this Fall, consider starting an 4-H outdoor club and enrich your students learning experience and opportunities.

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

**To register:** Contact Jody. Einerson@oregonstate.edu and receive the link to submit a simple online form.

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

Discover how you can become involved and make a difference for the youth in your community.

This year we will be hosting our 4-H New Leader training virtually. Please check our website for fall training dates and information on how to register.

**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 260 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.

4-H volunteers are the adults and teen volunteers who offer their time and talents to our program.

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**The 2020 Dry Farm Project Virtual Field Tours Continue through September continued from Page 11**

**Sept. 16, 10 a.m.: Squash Variety Trials**
More than 30 growers in the Dry Farming Collaborative are participating in our squash variety trials this year (sponsored by The Dry Farming Institute). We are evaluating delicata (‘Zeppelin’, ‘Honeyboat’, ‘Candystick’) and maxima (‘Stella Blue’, ‘Silver Bell’, ‘Tetsukabuto’) under dry-farmed conditions. Tour trials and learn about observations from participating farmers and researchers in the field.

**Sept. 23, 10 a.m.: Corn Breeding Project**
With the financial support of the Agricultural Research Foundation (ARF), we are advancing a dry farmed field corn breeding project involving the genetically diverse, Open Oak Party Mix culinary dent corn variety (Adaptive Seeds, Brownsville, OR). Additionally, we will feature a new, pilot collaboration with the Northern Organic Variety Improvement Collaborative (NOVIC), in which we are assessing a dozen corn varieties for dry farming performance and culinary quality for nixtamalization into hominy/posole and masa. We will go over the basics of our corn breeding process, including hand pollination and principles of recurrent selection - as well as discussion on agronomic and culinary qualities of diverse field corn varieties.

**Sept. 30, 10 a.m.: Harvest Showcase of Dry-Farmed Vegetable Varieties**
Celebrate the harvest and see the varieties trialed in our various research projects and learn about their performance in our on-farm trials this year from growers and researchers! This will include tomatoes, potatoes, squash, melon, dry beans and corn. The Dry Farming Institute will organize several pick-up locations in Western Oregon for a produce box featuring these varieties in advance of field day for you to see and taste (proceeds will help support next year’s variety trials!). We aren’t able to do this together in-person this year BUT we are still all in this together!

http://extension.oregonstate.edu/linn
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 2020 winners of these scholarships are:

Gracelyn Krahn – Gracelyn graduated from Santiam Christian High School. As an active Linn County 4-H member, Gracie learned the importance of service at a very early age. She is a sixth-generation dairy farmer and was crowned the 2019 National Jersey Queen. She serves as a teen leader, is captain of her cheer team, and is President of her FFA Chapter. Gracie plans to attend Linn Benton Community College and then transfer to Oklahoma State University where she will major in Agricultural Communications and Animal Sciences.

Pippi Somatis – Pippi graduated from Sweet Home High School with a 4.0 GPA. She has always made education a priority and believes that a good education is the key to being successful. She was active in 4-H with dairy goats and horses and was a member of OHSET (Oregon High School Equestrian Team). She was a cheerleader, member of the school equestrian team, and served as a student government board member. Pippi is dual enrolled and plans to attend Linn-Benton Community College and then Oregon State University. She will study Animal Science with an emphasis on Equine Science.

SNAP-Ed Helping Boost Community Health

Continued from Page 1

Allaback added.

“All also, I love that our preschoolers return home to share about this experience with their families, which then encourages parents to try out healthy recipes,” she said.

At South Shore Elementary, second grade bilingual teachers Janet Wolf and Delia Guillen also praised the program.

“The SNAP-Ed service is important because it exposes students to healthy, nutritious foods in a fun, motivating and hands-on manner,” the teachers said in an email response to questions. “The program is very engaging, both outside and inside the classroom.”

Guillen and Wolf also appreciate that the program exposes school children to the school’s garden. “Many of our students don’t have the opportunity at home to plant a garden and this becomes their first hands-on gardening experience,” they wrote.

Allaback also spoke highly of a SNAP-Ed program on personal hygiene called the Highspeed Handwashing protocol. “This simple routine has been a foundation to our success as a preschool community,” Allaback said. “Since beginning this protocol a few years ago, our attendance is up and illness is down. In light of the current pandemic, I believe these routines will be more important than ever for teachers to implement in their classrooms.”

Looking forward, Dodge said the COVID-19 pandemic has brought new needs to the community that SNAP-Ed hopes to address. Among current planning efforts are developing methods for SNAP-Ed to deliver its nutrition and activity education to students learning at home.

Through its multi-faceted approach to helping people lead healthier lives, SNAP-Ed strives to be a vital part of the Linn and Benton county communities, Dodge said. Many, including teachers and Food Share personnel, would say the program has and continues to meet its goals.

4-H Youth Mental Health Survey continued from Page 5

really hear them when they respond and that you care about their feelings.

Share Power: Treat me with respect and give me a say
• Invite young people to tell you how they think you can support them during their time away from their school or program.

Expand Possibilities: Connect me with people and places that broaden my world
• Create opportunities for young people to evaluate how authorities at the local, state, and national level are responding to the crisis and to consider what they would do differently if they were in power

For the full checklist, visit https://www.search-institute.org/wp-content/uploads/2020/03/Coronavirus-checklist.pdf Copyright © 2020 Search Institute®, Minneapolis, MN; 800-888-7828; www.searchinstitute.org. All rights reserved.

North Santiam Watershed Council (NSWC) seeking volunteer Board members

The North Santiam Watershed Council (NSWC) Board of Directors is currently seeking potential future volunteer Board members.

Previous Board service is not required, but experience with or knowledge of non-profit organization management is a plus. Current Board committees include executive, governance, and finance. We are planning to create committees for community engagement, fundraising and education. Therefore, we are specifically seeking individuals with experience, expertise or an interest in these areas.

For consideration, please email nswcboard2020@gmail.com and we will coordinate a brief telephone and/or Zoom interview conversation with you and the members of the NSWC Governance Committee. Candidates will be reviewed on an ongoing basis for currently vacant positions.

http://nordsantiam.org/http://northsantiam.org/nsantiamwatershed